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The discourse of computer-mediated
communication: A study of an online community

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Declaration

I confirm that this is my own work and the use of all material from other sources has been properly and fully acknowledged.

For Mary

ABSTRACT

This thesis is an exploration of the discourse of computer-mediated communication (CMC), in particular synchronous, text-based CMC (SCMC), as used by a community of English language learners and teachers who meet in spaces on the internet. The study addresses the question of how language in use is affected by mediation *via* computers. Because attention is on a virtual community, two further questions are posed: What are the linguistic and discourse resources which individuals need for successful interaction within the community? How does the character and purpose of the community affect the linguistic and discourse patterns of use?

The thesis is organised into four main parts and a brief concluding part. Each main part contains two chapters: a background theoretical discussion; and an investigation with close reference to data from the virtual community.

Part One is an introduction to online discourse. Chapter 1 introduces CMC and its sub-types. Chapter 2 focuses on the virtual community and the spaces on the internet where the interaction takes place. In Part Two the concern is with literacy and SCMC. Chapter 3 is an overview of literacy issues, ultimately asking what it is to read and write online. Chapter 4 relates questions of literacy to specific literacy practices within the virtual community. In Part Three coherence and cohesion are at issue. Chapter 5 outlines the types of textual and background knowledge that participants in SCMC require to bring coherence to the discourse. In Chapter 6 attention is on topic and conversational floor in SCMC. Online learning is under consideration in Part Four. Chapter 7 is about language learning and CMC. Chapter 8 examines teaching and learning in the virtual community, both of language and of the skills of electronic literacy. Part Five, Chapter 9, is a concluding summary of the main points of the thesis and a discussion of its implications.

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Note: A CD-ROM containing 150 numbered logs of SCMC discourse text from the *Webheads* community (labelled S001 to S150) can be found in the inside back cover of this thesis.

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GLOSSARY

ACMC	Asynchronous computer-mediated communication – for example, email
ASCII	American Standard Code for Information Interchange – also known as plain text
BBS	Bulletin-board system <i>or</i> service – a type of ACMC
CACD	Computer-assisted classroom discussion
CALL	Computer-assisted language learning
CMC	Computer-mediated communication
GUI	Graphical user interface
ICTs	Information and communications technologies
IRC	Internet-relay chat
ISP	Internet service provider
LAN	Local area network – a computer network covering a relatively small area
LAN CALL	Computer-assisted language learning over local area networks
MUDs and MOOs	Multi-user domains – virtual spaces on the internet where participants can interact with each other and with virtual objects
RL	Real life, as contrasted with ‘virtual’, i.e. online
SCMC	Synchronous computer-mediated communication – for example, internet-relay chat
SLA	Second language acquisition
SMS	Short message service. Mobile phone text-messaging
World CALL	Computer-assisted language learning utilising the www
www	The world wide web

Part One: An introduction to online discourse

Part One is introductory. Chapter 1 introduces quite briefly the central concerns of this thesis. These relate to the discourse of computer-mediated communication (CMC) as practised by members of an online community of language learners and tutors. There is also an outline of the structure of the thesis. The focus of Chapter 2 is the virtual community from where most data for this study derives.

Chapter 1 Discourse and computer-mediated communication

1.1 Introduction

Computer-mediated communication (CMC) has contributed to the development of novel features of language, and to equally novel circumstances of language production. It is essential for an applied linguist investigating the discourse of CMC to aim to answer the question of how language in use is affected when it is mediated by computers.

Beyond this, there is an equal imperative to address the *effect* on participants of such language in use. This thesis is an exploration of these questions through an examination of the discourse of a group of individuals from around the world who meet online as a community of language learners.

This introductory chapter offers some preliminary comments on the important themes of the thesis:

- the nature of the discourse of computer-mediated communication
- the relationship between CMC and discourse analysis
- the central importance of the virtual community in a study of CMC discourse
- the interplay in this particular study of electronic literacy, language learning, and communicative competence.

It also provides an outline overview of the remainder of the thesis.

1.2 Computer-mediated communication (CMC)

1.2.1 *Types of CMC*

CMC is: ‘communication that takes place between human beings *via* the instrumentality of computers’ (Herring, 1996:1). Thus it is communication enabled by specific information and communications technologies (ICTs) which we can refer to as the various *types* of CMC. Within such a broad definition as Herring’s, the present range of CMC types includes email, postings on electronic bulletin boards and lists, telephone text-messaging (SMS), internet relay chat (IRC), communication in text-based multi-user domains and virtual worlds (MUDs and MOOs), video and audio conferencing.

Explanations for acronyms and technical terms are provided in the glossary. We should

note at the outset that when writing about such a fast-changing area as CMC, some of what follows may soon be of only historical interest. The caveat is therefore that the information presented here is current in mid-2003.

1.2.2 Dimensions of CMC

Categorising types of CMC is, on the face of it, quite straightforward: it is either text-based or not; it operates in real time or not. In fact there is a multiplicity of CMC dimensions, and distinctions between these are not always clear. In some cases there is a lack of agreement on what is and what is not CMC.

There is a commonly held two-way distinction between CMC types which is generally followed in this thesis. Temporally, a distinction can be made between *synchronous* CMC, where interaction takes place in real time, and *asynchronous* CMC, where participants are not necessarily online simultaneously. We can also distinguish between *text-based* and *non text-based* CMC. Synchronous CMC includes various types of text-based online chat, computer audio and video conferencing; asynchronous CMC encompasses email, discussion forums and mailing lists. The temporal dimension (synchronous versus asynchronous) and the textual dichotomy (text-based CMC or not) are represented in figure 1.1 as a 4-way matrix, including examples of CMC types.

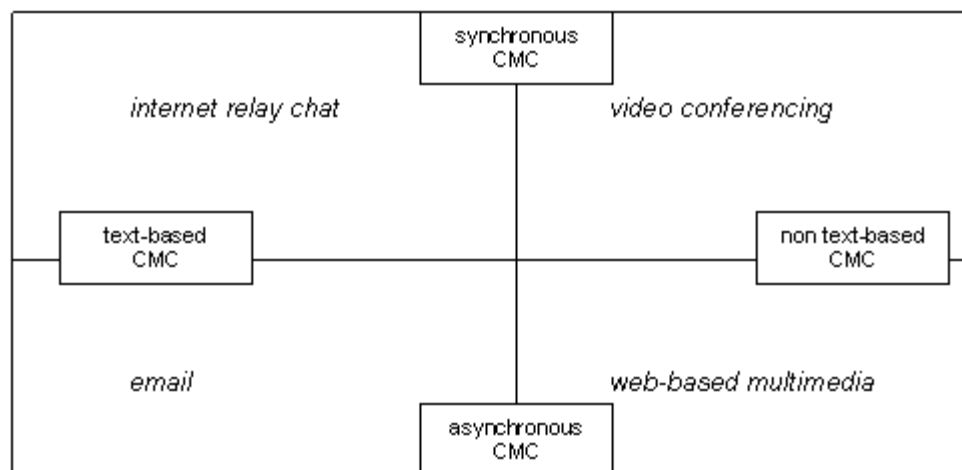


Figure 1.1 Some dimensions of CMC

Further distinctions can be made: between CMC which takes place over local area networks (LAN CMC) or over the internet; between CMC which is one-to-one, one-to-many, few-to-many, and so on. As technology grows in sophistication, so such distinctions ever fracture and fragment. Until recently, for example, audio conferencing

on the internet was either between an individual sender and receiver (one-to-one) or from one sender to a number of receivers (one-to-many). As bandwidth enlarges, so the number of concurrent participants can increase, and more participants can speak, as well as listen, in an audio conference.

There are thus certain shortcomings associated with a straightforward categorisation of CMC types, however helpful such distinctions may seem. Two such difficulties are outlined below: the question of what is and what is not CMC; and the position of the boundary between synchronous and asynchronous CMC.

CMC or not CMC?

There is debate as to what to include within a definition of CMC. For example, Herring's definition of CMC quoted above is broad, and implies inclusion of video and audio conferencing. Murray (2000a:399) on the other hand restricts the definition to include only text-based modes. Such a restriction, however neat, is nonetheless problematic. It might be asked: should mobile telephone text-messaging (SMS) be included within the scope of CMC? And should communication using speech on the same instrument be excluded? The question becomes more complex when we ask what *communication* actually entails. Does communication have to be fully conscious? How does it take place? What is involved? How far does it influence others? How central is cognition and verbal expression? In this thesis, we take a broad view of such matters. The anthropologist Ruth Finnegan defines communication as: '... a dynamic interactive process made up of the organised, purposive, mutually-influential and mutually-recognisable actions and experiences that are created in a variety of modes by and between active participants as they interconnect with each other' (2002:28). Both welcome and disturbing, from the perspective of an applied linguist, is the emphasis in this definition that communication is not confined to linguistic or cognitive messages but also includes 'experience, emotion and the *unspoken*' (Finnegan, 2002:5).

Subscribing to such a view of communication with regard to CMC involves recognising that it includes not only person-to-person interaction, be it text-based or not, synchronous or asynchronous. Encompassed within the definition are visual, audio and multimedia artefacts and archives on the www, and their various linkages via the communications network of hypertext.

Within such a broad definition of CMC, some narrowing of focus is required. In this thesis, and recalling Herring's definition, we concentrate on human-human communication. We also restrict attention to text-based modes of CMC, notwithstanding the influence of multimodality on CMC discussed at various points throughout the thesis. And within text-based CMC, of most interest is *synchronous* text-based CMC (referred to throughout this thesis as SCMC). The distinction between synchronous and asynchronous CMC is discussed here, followed by a closer preliminary description of the types of CMC to which most attention is paid in this thesis.

Synchronous or asynchronous?

The distinction between synchronous and asynchronous CMC is somewhat problematic. Herring (1999), discussing the text-based mode, distinguishes between one-way and two-way SCMC. In one-way SCMC turns cannot be seen by other participants until they have been sent, while in two-way SCMC they can be seen as they are being composed. Most SCMC, for example internet relay chat (IRC) and the textual interaction in the virtual worlds of this thesis, is one-way SCMC. As such it is synchronous but not *as* synchronous as speech. It may also be that forms of text-based CMC usually considered to be asynchronous need to be reassessed. For example, users of mobile telephone text-messaging (SMS) can engage in interactions consisting of multiple exchanges within a very short space of time. Likewise, if two interlocutors are online simultaneously, a series of email exchanges can approach the synchronous in speed. There is evidently a cline, not a dichotomy, between synchronous and asynchronous communication.

1.2.3 Text-based CMC

Most data in this thesis derives from the synchronous CMC forums of *Webheads*, a group of English language learners and tutors who meet on the internet. The communication under investigation is primarily text-based. Synchronous text-based CMC (SCMC), or written conversation in real time, occurs on local area networks (LANs) and on the internet. Internet relay chat (IRC) is the most well-known type of SCMC: participants can meet in any of tens of thousands of internet chat rooms, each dedicated to a particular topic. Similar to IRC is the variety of virtual environment which is the source of much data for this study. This is called a MOO: a Multi-user domain, Object Oriented. In these virtual spaces on the internet participants can interact with one another in real-time – can

hold written conversations – in a range of rooms or other virtual spaces which they or the system designers have created.

1.3 CMC and discourse analysis

We have introduced some aspects of text-based synchronous CMC (SCMC), the general discourse type at the core of this thesis. Here we present some principles and approaches to the analysis of discourse in the study.

The first principle of the approach to discourse analysis followed here is that meaning of words, phrases and stretches of text is not fixed or autonomous but is contingent upon context. This is an ‘applied linguistics’ view of discourse whereby language is the focus but not the only concern (to paraphrase Cook, 2001:4). It is the one followed by, *inter alia*, Cook (1989, 2001); Brown and Yule (1983); and Widdowson (1984).

A discourse analyst’s focus on the text in the quest for a description of cohesion (amongst other things), which is to say, a focus on the *micro*, risks the temptation of over-generalisation, which in this thesis we are at pains to avoid. On the other hand, paying too much attention to the *macro*, to the many contextual factors, risks rendering research meaningless: one cannot analyse everything, any more than one can transcribe everything. There is a paradox inherent in the analysis of spoken discourse that Cook (1995:51-2) describes, and which applies equally to analysis of CMC:

... that certain elements of spoken communication both must be transcribed and cannot be transcribed. They must be transcribed because they alter the meaning of what is happening for the participants and to exclude them can lead to misunderstanding. They cannot be transcribed because their boundaries are not clear, because they are infinitely extendible, or because they are made up of an unknowable or indescribable subjective reality.

It is possible to capture an enormous amount of CMC and related data for analysis: logs of SCMC chats, recordings of voice conferences, videos of on-screen interaction, recordings of key-strokes, videos of individual participants interacting at the computer, and so on. The discourse analyst must aim to steer a steady course between neglecting important contextual factors and attempting to overanalyse context. This is done in part by viewing discourse analysis as the constant interaction between the text and context, between the global and the local, between the social and the linguistic choices made by participants. No apologies are made for a focus on the text of the discourse as the primary material for analysis in this thesis. It is tangible, stable, and open to isolation for the purposes of analysis. Yet it is not considered as an autonomous object capable of

revealing meaning without any appeal to broader, though problematic, contextual features.

Accepting the ‘applied linguistics’ view of discourse, there remain certain difficulties which recur as themes at various points in the thesis. Posed as questions disingenuously implying binary oppositions, they relate to discourse analysis in this thesis: What is the relationship in computer-mediated discourse between text and context? How is coherence ascribed in discourse which is *prima facie* uncohesive? What is the status of CMC as spoken or written language?

1.4 CMC discourse and the virtual community

Referring to data from a single online community, the *Webheads* community in the case of this thesis, has a number of advantages. Four inter-related benefits are noted here. Firstly, we are able to switch between the general and the particular. The structure of this thesis is such that, within each part, a background chapter is followed by a chapter of further examination with reference to the *Webheads* community. Discussions of broad matters of a theoretical nature are illustrated with specific examples from data deriving from interaction within the community. By moving from the general to the particular, rather than vice versa, we avoid the temptation to draw conclusions which purport to apply to all CMC contexts. It is hoped, and indeed expected, that findings in this thesis will serve in some small way to inform the broader fields of CMC, discourse analysis, literacy studies and computer-assisted language learning. However, the aim is not to suggest that all conclusions drawn here apply to all or any other contexts of CMC use.

Secondly we emphasise that the technology operates within a social sphere. The contention throughout this thesis is that the language of CMC is shaped by both the technology and the social context within which it operates. Prioritising the social at times avoids a restriction to deterministic accounts of CMC discourse whereby linguistic and discourse features are directly attributed to an autonomous technology.

Thirdly, we can avoid viewing features of the discourse as solely textual. Micro-analysis of conversation, including the written conversation described in this thesis, runs the risk of treating the text as independent of the circumstances of its production. This tendency of micro-analysis can be tempered by grounding it in accounts of the social context of the community.

Finally, the community itself serves as a very useful contextual basis. Hymes (1974:4) notes that for an adequate approach to language:

... one cannot take linguistic form, a given code, or even speech itself, as a limiting frame of reference. One must take as context a community, or network of persons, investigating its communicative activities as a whole, so that any use of channel and code takes its place as part of the resources upon which the members draw.

In later parts of this thesis, discussion turns to a consideration of electronic communicative competence. Such discussion requires reference to the context of a particular community.

We have already noted in this chapter that the research is concerned with the language used by a community of learners and tutors on the internet. The community is viewed as a backdrop for discussion of the main questions: how language in use is affected by computer mediation, and what novel discourse, linguistic and literacy practices emerge through CMC.

1.5 Language learning, electronic literacy and communicative competence

This thesis, as noted above and in the introduction of the chapter, concerns the way language in use is affected through mediation by computers. In a study based on data from one particular community, two questions arise:

1. How does the character and purpose of the community affect the linguistic and discourse patterns of use?
2. What are the linguistic and discourse resources which individuals need for successful interaction within the community?

The first question is addressed by raising further points which have a closer focus on the community. In particular, the issue of language learning with the *Webheads* community is tackled. *Webheads* is a community comprised in part of language learners, but what sort of language learning, if any, takes place? And how, if at all, is the fact that *Webheads* is a language learning community reflected in the discourse?

The second question can be reframed in terms of two complementary notions: *literacy* and *communicative competence*. In later parts of this thesis, the concern is with literacy, and literacy practices of the *Webheads* virtual community. We also relate such literacy practices to individual community members' communicative competence. We do this by asking what knowledge (linguistic, discourse, technical or sociocultural) is required by members

of *Webheads* to communicate appropriately within the community? Thus learning encompasses not just language learning, but also learning the skills of electronic literacy. This equates well with the variety of functions of *Webheads* discourse as perceived by the members of the community.

1.6 What *not* to expect in this thesis

To reiterate: this thesis is an investigation into the discourse of CMC, illustrated with examples deriving principally from one particular online community. That this happens to be a community of language learners and tutors is certainly significant, and the implications for language learning are a major theme of the study. But such implications are neither of exclusive nor primary importance. In this sense the thesis is limited in scope. However, we must recognise that examination of the spectrum of communicative activities of a particular community as a whole is outside the reach of this or any other study. Naturally there are limits. It may nonetheless be appropriate to conclude this introduction quite personally by saying what the reader should *not* expect:

This is not principally a study of second language acquisition online

The history of this research has involved a drift away from a concern with language learning online towards a closer interest in textual aspects of the discourse. I started studying the text of the discourse emanating from *Webheads*, a group of language learners and tutors who meet online, at the same time as I started participating in their online text-based forum. Early examination of the text, that is to say, printouts of logs of interaction from the various SCMC forums of the *Webheads* group, led to the confirmation of the feeling I had as a participant-observer that little explicit language learning or teaching was occurring. Communication seemed to be the online equivalent of that prototypical oral genre, spoken casual conversation, as we see from a characteristic stretch of text in example 1.1 below:

(1.1)

```
Ying-Lan: HI, Michaelc.  
MichaelC: How are you both?  
Maggi: fine, you?  
Ying-Lan: ^Fine... girl's talk.  
MichaelC: I'm OK - don't know about the girls' talk though.  
Should I leave?  
Maggi: hehehe  
MichaelC: I guess you can whisper to each other!  
Maggi: maybe you could learn something!
```

Moreover, whatever explicit instruction did take place had as a focus the technologies of CMC: how to build a web-page, for example, or how to download a free piece of CMC software. It was also often unclear both from examination of the downloaded text and from actual participation in the discourse who were the tutors and who were the students. *Webheads* was, I understood, not a conventional course of language instruction: rather it was the coming together of a group of self-selected individuals from a variety of linguistic backgrounds with a common interest in language learning and technology.

This is not an exercise in multimodal discourse analysis

Webheads' interest in the technologies of CMC often tempted me to pay greater attention than I have done here to the multimodal nature of communication online, and indeed one happy by-product of this research has been the understanding I have gained of the shift towards the visual in modern communication. Nonetheless, my primary interest, and the focus of this thesis, is text-based synchronous computer-mediated communication, referred to throughout as SCMC. This discourse type, written conversation taking place in real time, was startlingly novel when I first met it. However, within the three years of this research project, it has grown commonplace. At the beginning of the research, it was still normal to have to explain it at length. Now, the shorthand phrase 'chatting online' is enough for many more people to understand what discourse type is my concern.

1.7 Organisation of this thesis

This thesis is organised into four main parts: an introduction to online discourse; an investigation of literacy online; a focus on the notions of *coherence* and *cohesion* in online discourse; and learning online. Each part contains two chapters, one of which contains a background theoretical discussion, while the second investigates these theories with close reference to data.

Part One comprises this introductory chapter and the next. Thus far, we have introduced the discourse of CMC, and have provided some idea of its sub-types and dimensions. In Chapter 2 we consider how the idea of *community* can be conceived when interaction is via text-based CMC. We introduce the virtual online community of language learners, tutors and others – *Webheads* – discussing the history of the group and

its status as a virtual community. We also explain in some detail the virtual spaces on the internet where the *Webheads* interaction takes place.

In **Part Two** the concern is with literacy practices and text-based SCMC. There is a distinction discussed in detail between an autonomous *literacy* (i.e. the general ability to read and write) and individual *literacy practices*. The distinction holds equally with electronic literacy and electronic literacies. In Chapter 3 we talk of the skills of electronic literacy, and correspondingly of components which form part of an individual's electronic communicative competence. Chapter 4 is an investigation of specific (situated) electronic literacy practices (competence manifest in performance) within the *Webheads* community. Literacy in general, and literacy practices within a certain community are not viewed as dichotomous, or contradictory. Literacy practices, corresponding to the type of knowledge called *attestedness* in Hymes' (1972a) model of communicative competence, are what is actually *done*. In this thesis, the textual records of literacy practices within the *Webheads* community are viewed as equivalent to evidence for electronic communicative competence. Specific and novel group literacy practices are identified in Chapter 4 and are linked to the notion of electronic communicative competence.

In **Part Three** (Chapters 5 and 6) coherence and cohesion in written conversation are at issue. Coherence is the property of text to be unified, and also to be meaningful to participants in the discourse. This requires appeal to various kinds of knowledge. In Chapter 5 we outline the types of textual and background knowledge that participants in SCMC require to render the text coherent. In Chapter 6, and with reference to the discourse of the *Webheads* community, we pay specific attention to topical coherence, extending the notion of the *conversational floor* in SCMC. The conversational floor is the interplay of the discourse topic, the role relations of the participants, and the communicative action undergone at a particular stage in the conversation. The suggestion is that a participant's understanding of all these elements helps coherence to be ascribed.

The implications of the use of text-based CMC on *learning* in an online community are under consideration in **Part Four** (Chapters 7 and 8). Determining the type of learning that goes on in the CMC environment and within the *Webheads* community is difficult partly because there is no *Webheads* 'course' in the conventional sense; rather, it is a site dedicated to language *practice*. Moreover, in *Webheads* there is no clear separation between tutors, learners and other members of the group. The question 'what's in it for them'

constantly recurs: What do learners think they are learning, and on what basis? What do tutors think they are teaching, and on what basis? What do other members of the *Webheads* group, neither tutors or learners, think they are gaining from participation? How does being a member of *Webheads* aid learning English? In the study of a virtual community whose main activity is ostensibly language learning, it is important to investigate how the discourse of CMC in the virtual community relates to these matters. Part Four of this thesis is concerned with such questions. In Chapter 7 the theoretical discussion centres on issues surrounding CMC and language learning. There, we establish that SCMC does not always lend itself to the traditional role of teachers and learners, or to established conceptions of instruction. In Chapter 8, which is devoted to the question of learning within the *Webheads* community, we draw on the foundational discussion in Chapter 7 as well as theoretical and methodological work from earlier parts of the thesis. We find that conventional aspects of language learning do occur, but not all the time by any means. What teaching does take place can be termed tutoring in the skills of electronic literacy, rather than English language instruction.

Part Five (Chapter 9) is a concluding summary of the main points of the thesis.

With primary reference to data from one particular online community of language learners and teachers, attention is paid in this thesis:

1. to the ways in which language is altered, and new forms of discourse emerge, through mediation by computers, and
2. to the possibilities afforded to participants in the discourse by this computer mediation.

Chapter 2. *Webheads*: An online language learning community

2.1 Introduction

Chapter 1 included discussion on the nature of computer-mediated communication (CMC), and the differences between the asynchronous and synchronous modes (ACMC and SCMC). In this chapter, which constitutes the remainder of Part One, the virtual community from which the data for this study derives is introduced. At the same time, certain issues concerning research into a virtual community are investigated in some detail.

Section 2.2 of this chapter is a descriptive presentation of the *Webheads* virtual language learning community. Reference is made to previous research into the group including reports, papers and a PhD dissertation. Section 2.3 continues the thread of investigation into the nature of CMC with reference to the places and spaces on the internet which *Webheads* occupies. These are the website and individual web pages, the email list (the ‘eclass’), and the various SCMC environments within which interaction takes place. Some remarks are also made on the status of SCMC discourse, on multi-tasking and on multimodality, themes which are developed in more detail in Part Two of the thesis (Chapters 3 and 4).

Webheads is a self-styled community on the internet. In section 2.4 we tackle the question of the extent to which individuals who do not know each other except online, can constitute a community. Experiential and more objective criteria for the existence of a virtual community are considered with reference to *Webheads*. Finally in section 2.5 of this chapter the ethics of carrying out internet research are addressed as the steps taken to gain access and consent to collect data for this study are documented.

Thus in this and the previous chapter the ground is prepared for a closer consideration of the themes of this investigation into the discourse of CMC: the nature of literacy online (Part Two, Chapters 3 and 4), a study of coherence and cohesion in the SCMC spaces of *Webheads* (Part Three, Chapters 5 and 6) and an enquiry into the types of learning which take place in the virtual environment (Part Four, Chapters 7 and 8).

2.2. Welcome to *Webheads*

Webheads is an online community of English language learners, teachers and others which has been meeting on the internet since 1998. The group was founded by Vance Stevens,

until recently computer-assisted language learning (CALL) coordinator at the Military Language Institute (MLI) in Abu Dhabi, UAE. *Webheads* grew from an online writing class he was running on the voluntary internet English Language programme *English for the Internet* (EFI). Stevens says in an email to the *Webheads* group (1 April 2003):

When I moved to Abu Dhabi in 1997 I was in an ICQ chat with Dave Winet (founder and head guru of EFI, English for Internet at <http://www.study.com>) when he remarked that we were like a bunch of Webheads. When the MLI got its LAN [local area network] and Internet set up and I started ‘hanging out’ at the Palace and in other chat areas, I gave that name to my restructured writing course.

Tutors and learners at EFI were volunteers and were given freedom to organise their online classes as they saw fit. Stevens’ original EFI class evolved somewhat before becoming the *Webheads* of this thesis. Figure 2.1 below charts the progress of the online class from its original form to its character during the period 1998 to 2001, the focal period under discussion here. Information in the table is drawn mainly from papers by Stevens (in particular 1999, 2000a) and from the content of interaction on the *Webheads* email list and logs of SCMC discourse text.

	<i>communication</i>	<i>pedagogic focus</i>	<i>level of English</i>	<i>tutor</i>	<i># students</i>
EFI class 1 (1996)	email	grammar/writing	intermediate	Vance Stevens	few students
EFI class 2 (1996)	email	individual student projects (no syllabus)	intermediate?	Vance Stevens	few students; ‘lack of commitment’ (Stevens, 2000a)
English for <i>Webheads</i> (1998)	email, SCMC (The Palace, ICQ), website	conversation, writing, development of individual homepage	intermediate	Vance Stevens, Maggi Doty, Michael Coughlan	merging students from three groups to one
Writing for <i>Webheads</i> (1998 – 2001 and beyond)	email (the eclass), SCMC (The Palace, Tapped In, various text-based and text-supported SCMC systems), website	conversation, writing, development of individual homepage	beginner, intermediate, advanced, expert user	Vance Stevens, Maggi Doty, Michael Coughlan, Ying Lan, John Steele	growing number of students and others; 236 members of <i>Webheads</i> eclass from 43 countries on 23 May 2003

Figure 2.1 *The evolution of Webheads, 1996-2001*

By 1998 *Webheads* had an email list, the ‘eclass’, met in various SCMC environments, and had developed a website with pages for individual members. There were five volunteer tutors, and a growing number of members including learners of a range of levels.

As mentioned, and as will be explained in section 2.5 below, most data under discussion in this thesis is drawn from interaction which took place during the period from the beginning of *Webheads* in October 1998 to December 2001, three years and two months later. *Webheads* continues to exist in similar form to this day, the main change being the supplementation of *Writing for Webheads* with *Webheads in Action*. This separate group, which plays no part in the discussion in this thesis, was started in 2002 with the intention of providing a forum for teachers interested in the integration of the technologies of CMC into their practice. *Webheads in Action* is the subject of a case study by Johnson (forthcoming).

The original online learners were fielded towards Stevens' EFI class by Dave Winet, the founder of EFI. As *Webheads* became an autonomous group, and in particular after the merging of Stevens' class with two other EFI classes (Maggi Doty's and Michael Coghlan's), learners found their way through other routes. Word of mouth, internet searches, recommendations from teachers, and chance visits to a relevant site have all led learners to *Webheads*. A pattern which grew more common as *Webheads* developed was for teachers of English to meet each other through *Webheads* and to subsequently arrange keypal exchanges or SCMC sessions for their respective groups of students. It should be stressed that these teachers of English who were not *Webheads* tutors were also active participants in the eclass and the SCMC sessions.

To divide *Webheads* into students and teachers would be to impose onto it, mistakenly, the traditional view of classroom structure and dynamics. Stevens (2000b) explains an alternative point of view:

I can see the need to call people in the class .. the class? the group .. something other than students and teachers. We have some teachers of English who are not native speakers of English, Felix, Nova , and Marina, for example, and Dave the American teacher and occasional participant, not actually a student. Can you think of a better nomenclature system to more accurately reflect our roles? Maybe I'll call us tutors and friends.

Many of the learners participating in *Webheads* are also simultaneously enrolled in classroom-based language courses. *Webheads* for them has provided an opportunity for communication with other learners and more expert users of the language.

Webheads has been the focus of a number of papers and reports, mostly deriving from conference presentations. Stevens, in collaboration with *Webheads* members online, has recently presented at CALL and language learning and teaching conferences in Barcelona, Cyprus, Dubai, Abu Dhabi, Vancouver and New York. *Webheads* has been demonstrated entirely online at the ELT Online Conference 2001, and at the Fourth and

Fifth Annual Teaching in the Community Colleges Online Conferences, 1999 and 2000. These conference presentations usually focus on how this virtual language community has developed. Typically, Stevens presents a paper describing and explaining the *Webheads* community. Then delegates at the particular conference are invited to go online (if they are not so already) and meet and interact with *Webheads* members at a SCMC meeting place, explore the main *Webheads* site, and view the individual web pages.

Papers resulting from these conferences include Stevens (1999), Coghlan and Stevens (2000) and Stevens (2000b), which detail the development and structure of the *Webheads* community. Stevens and Altun (2002) describe an online exchange with *Webheads* at the MLI *Teacher to Teacher* conference, 2001. *Webheads* has also been the focus of a short case study (Bicknell, 1998). One report posted by Stevens on the main *Webheads* site is a commentary on the *Webheads* methodology in the form of an annotated threaded email discussion (Stevens, 2000a). This document consists of a digest of students' comments on *Webheads*, the responses of a survey of students' views on the course. This survey is also recorded (Stevens, 2000c, 2000d, 2000e). Coghlan and Stevens (2000) have also produced a paper on the development of the *Webheads* community. *Webheads* is also the subject of a PhD dissertation by John Steele (2001), professor in the English Department at the University of Puerto Rico. The focus of Steele's research is the learner's perception of the virtual community as a site for language learning.

What happens with *Webheads* bears little resemblance to traditional teaching, or even to more established forms of distance learning. As Stevens (2001) says, *Webheads* has the ability to: '...do an end run around the teacher and put students in touch with other target language speakers in authentically communicative situations.' The dissimilarity of *Webheads* to a traditional classroom teaching situation is further stressed when we are reminded that *Webheads* meets online, and thus issues surrounding control of the discourse are raised. Stevens (2001) sums up his view of the dynamics of *Webheads*:

Conducting online classes, or trying to monitor chats to which we invited all comers, or moderating lists or bulletin boards, is another endeavor not unlike herding cats. Not impossible to control, but perhaps **undesirable to control**. Undesirable because such projects tend to take on lives of their own. The organic nature of online interactions is a great asset, and in my *Webheads* project, I've just set wheels in motion and greased and nurtured them with a bit of HTML and email, and then I sit back and enjoy the serendipitous outcomes.

Questions pertaining to language learning with *Webheads* are addressed elsewhere in this thesis, in particular in Part Four, Chapters 7 and 8, where we return to such pedagogic matters as are only touched upon here. A discussion of participants' perceptions of

learning with *Webheads* can be found in Chapter 8. In this chapter, most reference to what might be called the *Webheads* literature relates to the technological background of the CMC discourse involved, to the status of the group as a community, and to ethical matters and data collection.

As a final note in this section, we can bring the *Webheads* story up to date. The original tutors (Stevens in particular, and also Coghlan and Doty) continue to play a guiding and support role with *Webheads*. The community continues to develop; as of 23 May 2003 there were 236 subscribers to the email list, though naturally there are varying levels of participation. In 2000, Coghlan (Coghlan and Stevens, 2000) estimated a core membership of about thirty people who actively contribute to the eclass, the SCMC forums, or both. That number remains the same today. And as previously mentioned, a new group, *Webheads in Action*, commenced its activities in 2002 and continues to be active; members of this group are mainly language teachers with an interest in the technologies of CMC.

Thus what started as a small-scale and at best partially successful online writing course under the EFI umbrella has evolved into a broader, looser conglomeration of learners, tutors, researchers and others meeting in a variety of spaces on the internet. These spaces, and what happens in them, are described below.

2.3 The places and spaces of *Webheads*

As we saw above, the *Writing for Webheads* online environment is a complex intertwining of modes employing asynchronous and synchronous, text-based, audio and video CMC tools. Coghlan and Stevens (2000:6) describe the possibilities afforded by having a number of meeting places on the internet:

... the strength of the *Webheads* model is that it allows for many different types of learner to participate. Some prefer fixed time meetings, some are more active in the more flexible time frame of the email list, and others are more intent on doing more formal assignments and having work corrected and discussed off list. Again, flexibility in 'mode of membership', or the willingness to accommodate a range of learning styles, has enabled the *Webheads* community to remain vibrant.

Below, and moving from the temporally more static to the more dynamic, we look in turn at the *Webheads* website and individual home pages; the email list (the 'eclass'); and the text-based and text-supported SCMC meeting places.

2.3.1 The web site and learners' individual pages

Figure 2.2 is a screen shot of the introductory home page of Webheads:

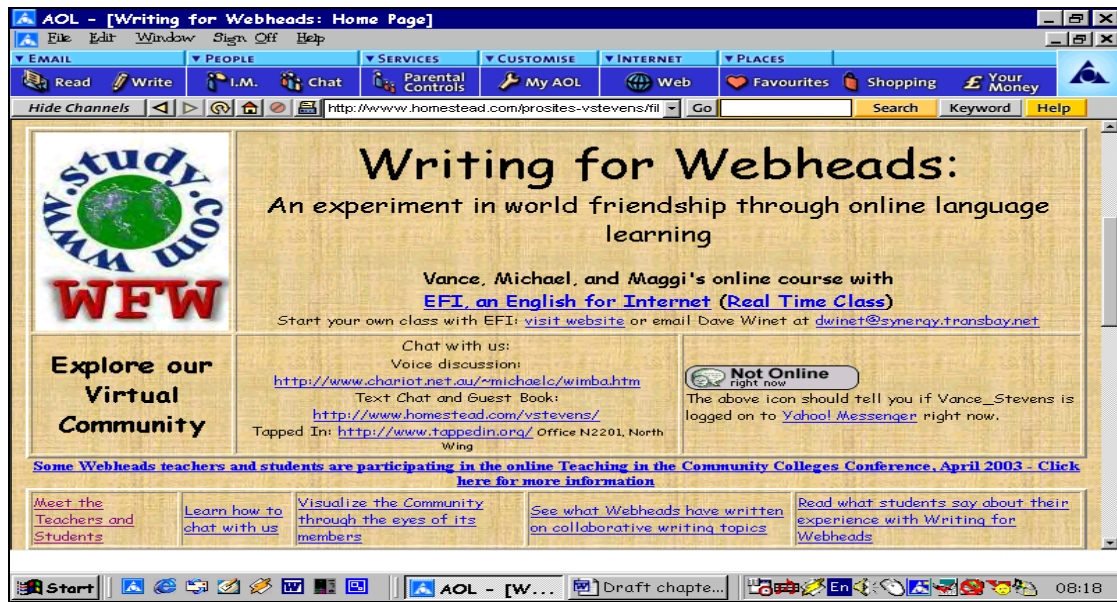


Figure 2.2 The Webheads homepage

One can find hypertext links to various resources: the individual members' web pages, links to the SCMC meeting places, to archives of the chat logs and the emails from the eclass, to samples of learners' writing, and to copies of reports and papers relating to *Webheads*.

The links to the individual web pages can be followed onwards in a series of further layered links. At this point, and as a demonstration of the *Webheads* site, we follow through a series of screen shots a particular route from the *Webheads* home page to the individual pages of a learner.

By scrolling down the screen of the homepage in figure 2.2, the following can be seen:

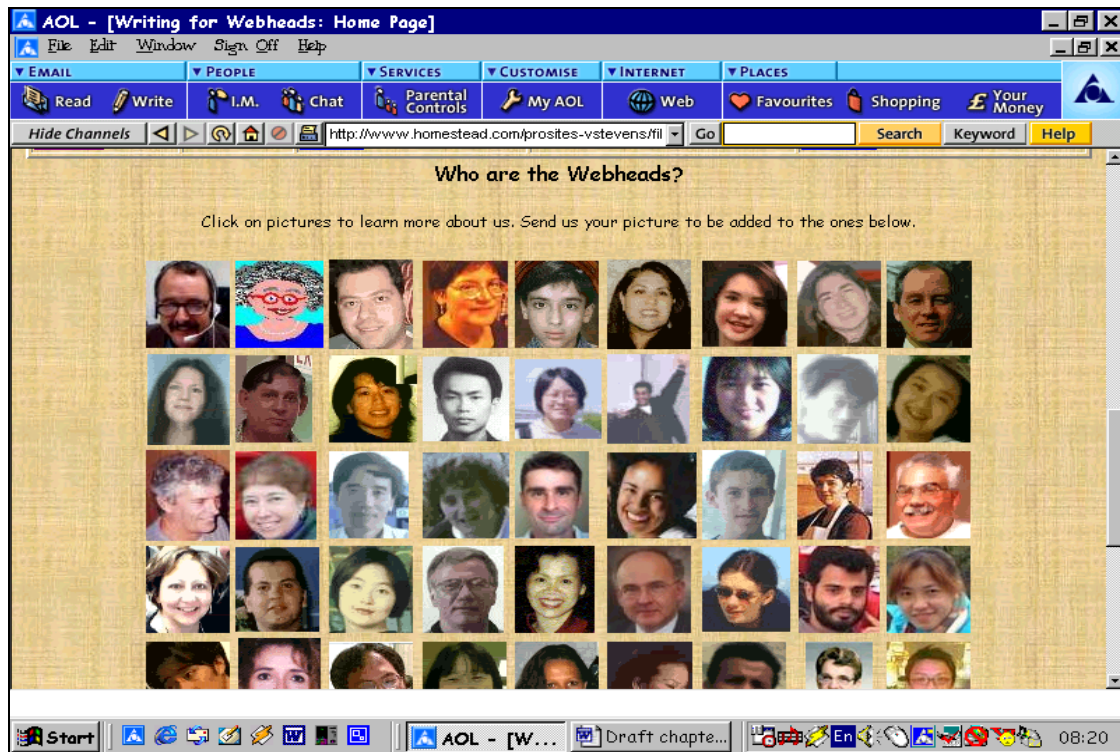


Figure 2.3 The Webheads members

Clicking on the picture of a member of *Webheads* leads us via a hypertext link to their web page.

All *Webheads* members have a web page linked to the main *Webheads* site. These are maintained by Stevens and the other tutors, though, as noted above, some participants create and maintain their own web pages as a focus for their learning. In addition to their introduction message, related welcome messages from other members, and their written contributions to the email list, each member's web page can contain photographs of friends and family, personal information, and any other material which they feel might be appropriate to post up. It might also contain hypertext links to stretches of text, sound files and webcam archives from synchronous CMC sessions which are relevant to that member. Messages sent to the eclass or directly to a tutor are corrected and posted on to the individual's site.

We have followed the link to Gosia's web page, where we see the following:



Figure 2.4 Gosia's web page

There is a further hyperlink: *Summer vacation 1999*. By following this link we see the following:



Figure 2.5 Gosia's summer 1999

The text on this page was originally sent to the email list, was corrected by a tutor, and posted onto the learner's personal website.

A discussion of reading the web as an element of electronic literacy will be found in the following chapter, 3. There we note that the activity of reading the web is unlike that of reading traditional printed material. In particular, the fundamental arrangement is non-linear: hypertext links allow the web surfer to create an individual route through the layers of links within and outside a site.

2.3.2 The email list

The 'eclass' of *Webheads* is where most new *Webheads* members join the group. It is there that new members post their introductory message. This message is then corrected and transferred to the individual web page created by the member or, more likely, by Stevens, as was shown above. The eclass is the *Webheads* forum for asynchronous CMC. As with most email lists, all subscribers receive everything posted to the list, and are able to post to the list themselves. The list is hosted by Yahoo Groups, where messages are archived as 'thematically unified discussions' (Herring, forthcoming:3) known as *threads*.

Formerly, *Webheads* members have written on topics prescribed on a weekly basis by the tutors. As we see in Chapter 8, section 8.2, tutors with *Webheads* subscribe to approaches to language learning online which can be broadly described as 'natural'. Hence, the focus shifted to a less prescriptive development of topics. Threads of email discussion in Autumn 2001, for example, included reflections on the events in the US in September 2001, Halloween, and ways of celebrating Christmas, Eid and Hanukah. Plans for online meetings between groups of learners and of conference presentations are also discussed on the email list. Often a discussion which starts on the email list is continued in an SCMC session. Conversely, topics which emerge in the SCMC session are sometimes carried on in the email discussion.

In addition to the discussion threads and introductions from new members, the email list also includes welcome messages to new members, announcements of new web pages and availability of the latest annotated chat logs, comments on learning strategies, discussion of particular language points, and details of new CMC software which members may have found useful (Coghlan and Stevens, 2000).

It has already been established that there are a variety of participants with *Webheads*. On 23 May 2003 there were 236 subscribers to the eclass hosted by Yahoo Groups. By no

means all make contributions, and some make many more than others. The 28 messages sent to the list between 1 and 19 October 2001, for example, were sent by only seven different people.

The volume of email traffic in the eclass also suggests an active group. A chart showing the monthly totals of messages from the list's beginning in January 1999 until January 2003 is displayed as figure 2.6 below.

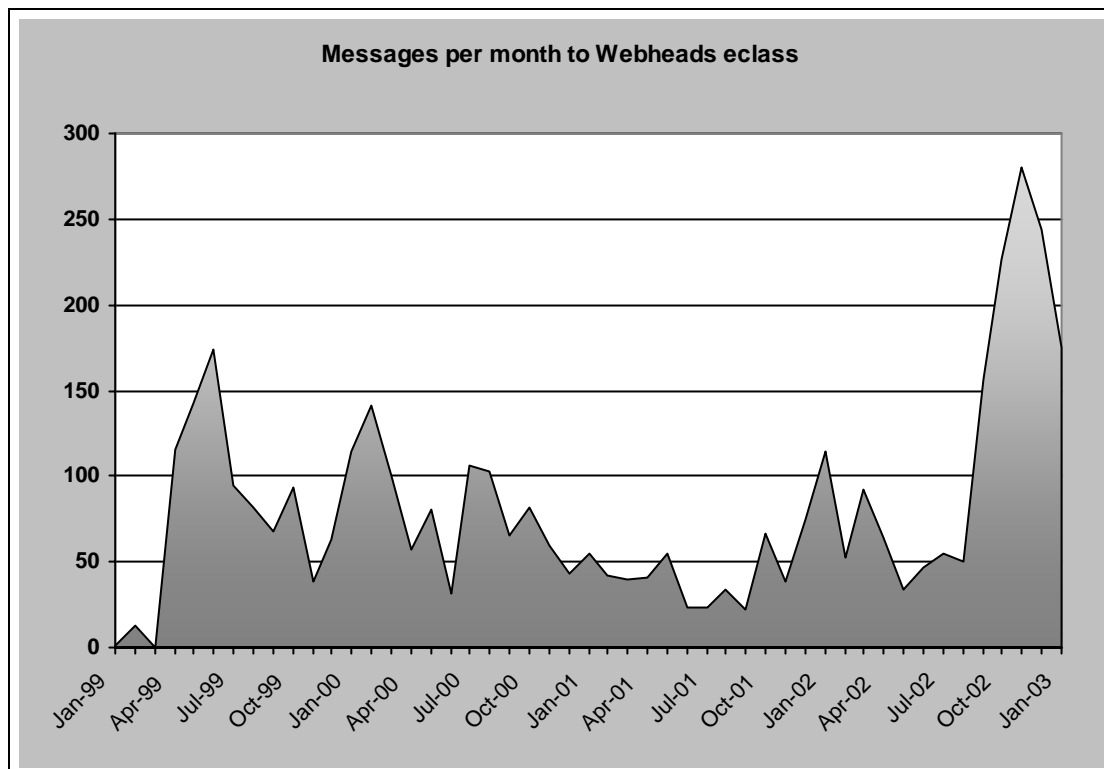


Figure 2.6 Messages to the Webheads eclass

In one month, March 1999, no messages were sent. However, in November 2002, a total of 278 messages were sent: an average of over nine a day.

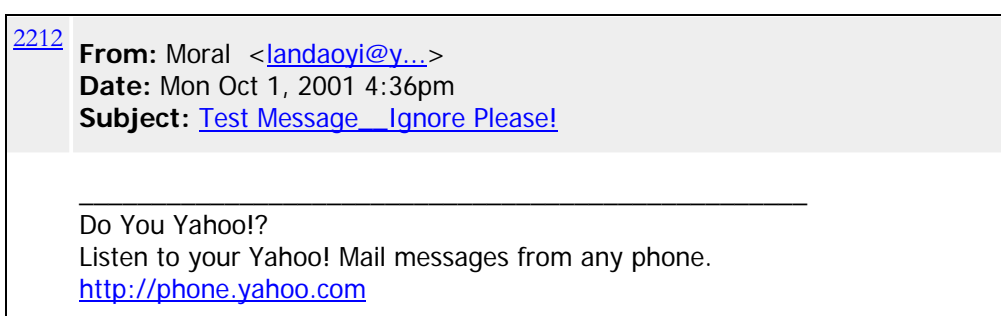
Rafaeli and Sudweeks' present a definition of interactivity which is useful in describing levels of interactivity in an email list such as the *Webheads* eclass. This definition is developed by Rafaeli (1988) and applied to interaction online in a series of papers (Rafaeli and Sudweeks, 1997, 1998; Rafaeli, Sudweeks, Konstan and Mabry, 1998 *inter alia*). Interactivity, in Rafaeli and Sudweeks' (1997:3) sense is:

... a process-related construct about communication. It is the extent to which messages in a sequence relate to each other, and especially the extent to which later messages recount the relatedness of earlier messages ... [It] is a general enough concept to encompass both intimate, person-to-person, face-to-face communication and other forums and forms.

Rafaeli and Sudweeks (1997), with reference to Rafaeli (1988) conceptualise interactivity as a continuum. At one end is *one-way* communication, where distinct and separate messages are transmitted from a person to an audience, with no response from that audience. In *reactive* communication, one side responds to another side. And fully *interactive* communication ‘... requires that later messages in any sequence take into account not just messages that preceded them, but also the manner in which previous messages were reactive’ (Rafaeli and Sudweeks, 1997:3). This is a rather limited conception of interactivity, not as helpful as other models of inter-turn cohesion in discourse in the traditions of conversation analysis or spoken discourse analysis (for example Sacks *et al.*, 1974; Sinclair and Coulthard, 1975; see also Chapter 5). It also ignores the extent to which ‘one-way’ messages can be interactive (see Widdowson, 1979; Cook, 1989; Hoey, 2001 on textual interaction). Nonetheless, this is how interactivity is perceived not only by Rafaeli and his associates, but also by Jones (1997) and in a testing of virtual community presence in IRC using Jones’ four categories by Liu (1999) (see section 2.4 below).

What is more, with regard to cohesion between messages on email lists, interactivity defined by cross-message reference is a useful construct for discussion of activity in asynchronous CMC. It is certainly evident in the eclass of *Webheads*. At the beginning of the following sequence of five email messages from a particular thread posted over three days in October 2001 the learner Moral sends an email message:

(2.1)



He wrote no text in the body of the email; that which appears is an automatically-generated advertisement.

Vance contacted Moral to ascertain why he had sent a test message, and sent the following to the eclass:

(2.2)

2213 **From:** Vance Stevens <vstevens@e...>
Date: Tue Oct 2, 2001 4:21am
Subject: [Re: Test Message Ignore? Never!](#)

Hi all,

Moral in Kunming has been having problems with his usa.net email and he recently shifted his Webheads subscription to his Yahoo account. His test message was to see if it was working and IT IS!! So, welcome back, Moral.

Vance

This is the reactive message; it reacts to a one-way message. The following message from Moral, the next in the thread, renders the conversation interactive:

(2.3)

2215 **From:** Moral <landaoyi@y...>
Date: Wed Oct 3, 2001 7:00am
Subject: [Re: Test Message Ignore? Never!](#)

Hello Vance and Webheads,

Because Yahoogroups blocked my email at usa.com, I haven't got Webheads mails for a while. Now I am back. You know it is always my pleasure to be with all of you. I won't leave Webheads.

Thank Vance so much for his kind greetings.

Good luck!

Moral

Two subsequent messages complete the thread: the first from Susanne:

(2.4)

2216 **From:** Susanne Nyrop <s.nyrop@g...>
Date: Wed Oct 3, 2001 11:51am
Subject: [Welcome back Moral :-\)](#)

Hi Moral,

just a few words to let you know that your new mail configuration works well, and to say how fine it is to know you and all the otherc great people all around the network.

The social and learning advantages of communication technique is the best part of it, but we cannot do anything similar unless the connection lines are OK! Thus, tech and social networking are closely intertwined. Hope to see you online one of these Sundays.

Yours webheaded
Susanne from Denmark

And finally in this thread from Michael:

(2.5)

2217	From: Michael Coghlan < michaelc@c... > Date: Wed Oct 3, 2001 0:52pm Subject: Re: Test Message Ignore? Never!
<p>At 02:00 3/10/01 +0800, you wrote: >Hello Vance and Webheads, > >Because Yahoogroups blocked my email at usa.com, I haven't got Webheads >mails for a while. Now I am back. You know it is always my pleasure to be >with all of you. I won't leave Webheads. > >Thank Vance so much for his kind greetings.</p> <p>Welcome back Moral! - Michael C.</p>	

Michael's message makes use of the email capability of quoting from a previous message (on this occasion from Moral, message 2215). Thus it demonstrates a double interactivity: it is interactive both within the thread of discussion and within the message itself.

It is quite clear that interactivity in the Rafaeli/Sudweeks definition outlined here is a feature of the *Webheads* discourse in asynchronous mode.

2.3.3 Synchronous text-based CMC, MUDs and MOOs

Most synchronous, or real-time, CMC with *Webheads* has taken place in a MUD (multi-user domain) or a MOO (multi-user domain, object oriented) on the internet.

The term MUD originally stood for Multi-User Dungeon, a reference to the role-playing game *Dungeons and Dragons*. Turkle (1995:180) describes them: '... when virtual spaces were created that many computer users could share and collaborate within, they were deemed Multi-User Dungeons or MUDs, a new kind of social virtual reality.' Today, MUD is taken to stand for Multi-User *Domain*, less bizarre, perhaps, than *Dungeon*. A MOO is a MUD – Object Oriented: people could now interact with virtual objects (rooms, furniture, food and drink) as well as with other participants. Developed as games in the 1960s (Eastment, 1999), these virtual spaces were originally entirely text-based; with the advances of the technology, participants on some MUDs and MOOs can now design their own virtual characters which can interact visually with other participants and with the virtual spaces which have two- or three-dimensional graphic effects. The internet allows users to log on to MUDs and MOOs from any remote site worldwide. As

with Internet Relay Chat (IRC) most interaction on a MOO is text-based and synchronous. However, in addition to the ability to interact with the environment as well as other participants, a MOO differs from IRC in that it offers other ways of communicating within its program: MOOmail, mailing lists, bulletin boards, and paging (Ioannou-Georgiou, 2001).

Webheads meets for SCMC chats in a MOO. These sessions are held weekly at the MOO *Tapped In* and until mid-2001 were hosted at the graphical MOO *The Palace*. *Webheads* members – tutors and students – gather for informal text-based chat sessions on a wide range of topics. Much of this thesis surrounds interaction in these SCMC sessions. In Chapter 4 of this thesis, we focus on the data which derives from these chat sessions in our analysis of aspects of electronic literacy introduced in Chapter 3. In Part Three (Chapters 5 and 6), the concern is with coherence and cohesion in SCMC, data again deriving from these chats. And in Part Four (Chapters 7 and 8) the discussion of learning in a virtual environment draws on the logs of the SCMC sessions. The virtual environments where the interaction occurs, *Tapped In* and *The Palace*, are sketched below.

Tapped In describes itself as: ‘the online workplace of an international community of education professionals.’ It is an online environment where: ‘... teachers and librarians, professional development staff, teacher education faculty and students, and researchers engage in professional development programs and informal collaborative activities with colleagues’ (from the *Tapped In* website). At *Tapped In* the text interface is similar to that of other text-based synchronous chat programs, and the text of the discourse scrolls up the screen (in plain text format) just as it does in internet relay chat (IRC). There is also a graphical user interface (GUI), TAPestry, which allows for the representation of the space of *Tapped In* as a ‘map of the campus’, around which it is possible to navigate through mouse clicks.

Figure 2.7 is a screen shot of the *Tapped In* interface:



Figure 2.7 The Tapped In interface

Turns are typed in the white box at the bottom of the frame; when they are sent they appear in the grey box above, which is seen by all participants. The map of the ‘campus’ is above this. In the case of the screenshot above, the interface shows just one ‘floor’ of one ‘building’; it is possible to navigate between floors, to pan in to individual rooms, and to pan out to a map of the entire campus. In addition to pointing the cursor and clicking on the GUI, navigation around the MOO can be carried out through textual commands which are typed in the text box towards the bottom of the screen. For example, to join a particular participant somewhere in *Tapped In*, the command `/join [name]` is typed. The text-based interaction is *one way* (Herring, 1999; Cherny, 1999:154) in that turns cannot be seen by other participants as they are being typed.

Further advantages of *Tapped In* are the ability to project a website, and the archiving capabilities. While the synchronous discourse is unfolding, participants may send not only a URL hypertext link but may also project the opened web-page onto other participants’ screens. The site can be viewed at the time or bookmarked for later study. Members of *Tapped In* also have the transcript of their session, from the time of connecting to logging off, sent to them via email. Logs of *Webheads* sessions are also archived within the MOO, in addition to the annotated archive maintained by Vance Stevens on the *Webheads* site.

The Palace is a recreational MOO that describes itself as a ‘graphical avatar chat’ (from its homepage). *The Palace* (figure 2.8) makes yet stronger use of the graphical element by allowing for the creation of movable *avatars*, or pictorial representations of participants.



Figure 2.8 The Palace interface

The term *avatar* is borrowed from Hinduism: Vishnu is said to appear on earth in one of ten incarnations, or avatars. In the main window we see the avatars with their nickname labels. Turns in *The Palace* are typed in the white box towards the bottom of the screen, and appear in speech bubbles above the appropriate avatar. A log of the text can be viewed as it unfolds in the box on the right of the frame. This chat log provides a more stable record of the interaction than the speech bubbles, which disappear after a short time on the screen.

It should be borne in mind that when SCMC interaction originally takes place, participants can see the text unfolding on their screens. They are also able to scroll back up the text box on the screen to re-read previous parts of the interaction. Furthermore, and as mentioned above, a particular feature of the *Webheads* meeting place *Tapped In* is that transcripts of members' interaction for the duration they are logged on to the system are emailed to them after they log off. These properties raise interesting questions about the relationship of text to discourse. There is a common clear distinction between text and discourse, summarised by Seidlhofer and Widdowson (1999:206), where 'text is the linguistic product of a discourse process.' In the case of spoken discourse analysis, the

interaction is usually recorded and transcribed prior to analysis, effectively separating the text from the context. Regarding SCMC, participants have immediate access to the linguistic product of the discourse process. They can read the text (the product) as the interaction (the process) unfolds. These points are discussed in greater detail in Chapter 5, section 5.4, with reference to sequential coherence in SCMC.

It follows that given the properties of multi-party text-based SCMC, and their departure from the dyadic spoken prototype used in much analysis of conversation, cohesion will be manifest in ways which differ from those in non-CMC interaction, and participants will ascribe coherence in correspondingly different ways, in the written mode. This is so, as we shall see in Part Three of this thesis; though there are also striking similarities between the discourse of spoken, and the discourse of written, conversation.

2.3.4 Integrating voice and video: Implications for discourse setting

SCMC is not limited to the text-based mode described above. *Contra* Murray (2000a), who restricts the definition of CMC to text-based interaction, audio and video conferencing via computers should also be included in the definition, as maintained in Chapter 1. This assertion is strengthened with the recognition that much audio and video conferencing is text-supported. That is to say, in addition and in parallel to the audio and video channel, a text-based SCMC interface is also present. Examples of such SCMC interfaces used by *Webheads* members are Yahoo voice and Yahoo video conferencing, capabilities which are included in the messenger program of Yahoo. There are a number of other similar systems available, such as Microsoft Netmeeting. Modern PCs are able to support the relevant software, which is free and relatively easy to download. However, sound and picture quality is variable. If the bandwidth (i.e. the size of the data ‘pipeline’) is small at either end, the sound quality will be poor (Kennedy, 2000).

The integration of voice and video with text-based SCMC raises interesting questions relating to the discourse setting as an element of communication. Setting in text-based SCMC can be perceived as dual; that is, participants are in a physical space (in the physical world, in Real Life) and simultaneously occupy one or more virtual online spaces. This sense is encouraged by the design of the GUI in a MOO as a place. Thus, interaction happens between individuals who are spatially distant – often scattered globally – while their online meeting place is an intimate virtual space: a classroom, an office, a palace garden, a university common room.

The implication of the dual setting is profound: participants interact with one another indirectly *in* the virtual space, rather than directly. When one is participating in SCMC on a MOO, one feels that the interaction is taking place *there*, in another place. This sense of dual setting in the text-based SCMC environment of a MOO can be represented diagrammatically (figure 2.9).

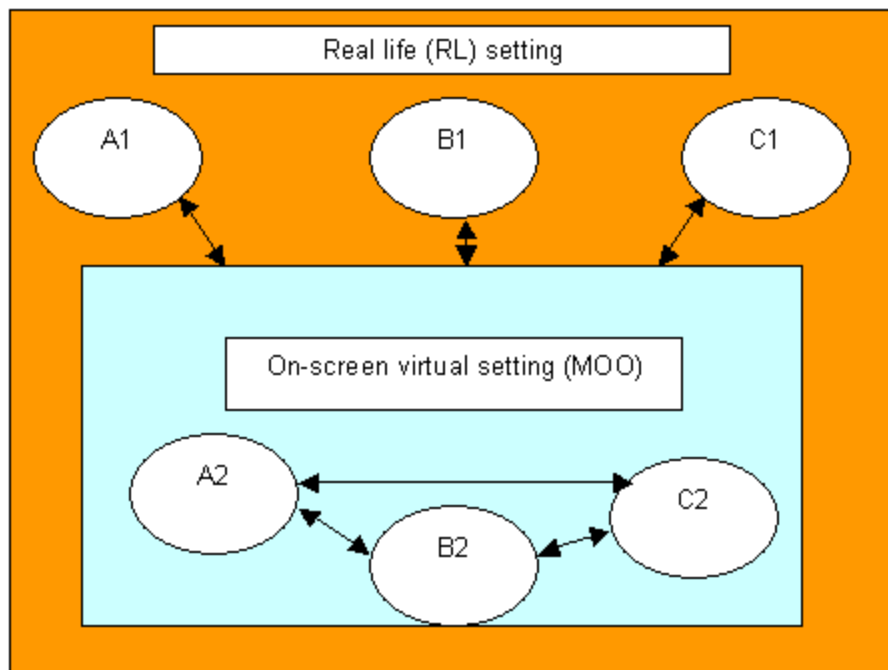


Figure 2.9 The dual setting

The perception of a dual setting is remarked on in a number of works in the literature of internet culture, for example *Life on the Screen* (Turkle, 1995) which assume a separation of the real and the virtual worlds. However, when telephony and video conferencing are integrated with SCMC, the sense that interaction takes place wholly in a virtual space is lessened. Text-based interaction in the MOO is still perceived as taking place in a virtual setting. The audio and video communication however are not perceived as existing in a virtual space any more than interaction on the telephone is perceived as taking place in a third 'elsewhere' (see figure 2.10).

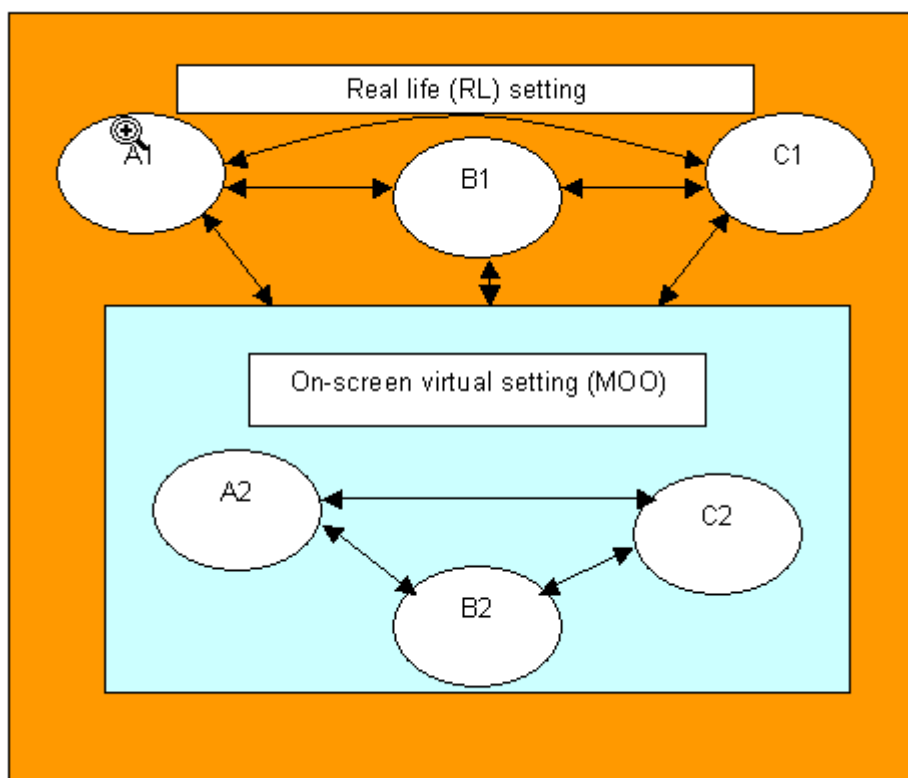


Figure 2.10 The dual setting, modified by audio CMC

Some *Webheads* learners react very positively to the growing accessibility of voice chat. In addition to being able to get immediate feedback on pronunciation difficulties, *Webheads* members report that the presence of voice provides a greater sense of community (Stevens, 2000a). However, it is not extremely popular, and is not used as frequently as the text-based *Tapped In*. The possibility of interacting only in the virtual setting, without the intrusion which voice and video make into the RL setting, continues to hold an attraction even when the possibilities for voice and video conferencing are obvious. The feasibility of creating diverse alternative personas or identities on the internet of the type discussed in Chapter 4 is greatly lessened if video and audio are enabled. And in Chapter 7 we review research which shows that simple level of participation amongst learners in other text-based SCMC environments is markedly increased compared to equivalent real life settings. In the following extract from the SCMC logs of *Webheads* (example 2.6), Vance sums up the general preference of text-based over voice and video SCMC:

(2.6)

Marina whom we hadn't seen in a long time joined us for voice chat, and we showed her our video cams. Most participants preferred the relative safety of Tapped In on this one, and stayed there.

Even when audio and video technology are used by *Webheads* members, they do not replace the text chat. These new modes of CMC are used in parallel and simultaneously to create a multimodal synchronous CMC environment. It is possible, and it is a possibility frequently exploited, for participants to be interacting simultaneously in more than one SCMC environment. In the following extract (example 2.7) from a chat in *The Palace*, Vance and Brazil refer to the fact that Vance is also communicating with Gosia using the chat program ICQ at the same time:

(2.7)

Vance: hi. I've got Gosia on icq
Brazil: Who is Gosia ??
Vance: Gosia is another student. Are you on icq now?
Brazil: Is the class finishing ??
Brazil: yes I am
Ying-Lan: @64,64 !It's Ying-Lan
Brazil: Hi Ying.
Brazil: We are in ICQ .. Wanna Join us ??

From a participant's point of view, the duality of setting as being either virtual or in real life may seem too simplistic and in need of reassessment. A number of recent investigations of on/off-screen discourse (Scollon, 1998; Scollon, Bhatia, Li, and Yung, 1999; R. Jones, 2002) note that the interplay between the real and the virtual is often continuous and all-pervasive. This recognition can also be found in literacy studies which recognise the array of an individual's situated literacy practices (e.g. Cope and Kalantzis, 2000; Kress, 2003). To summarise, at any one time, attention may be on any number of things both on and off the screen, and an individual may engage in a number of different literacy practices across modes and media. These propositions imply a dynamism and fluidity which is not well-captured by a simple binary division of on/off-screen discourse.

In this section we have touched on heavily intertwined aspects of what can broadly be termed *multimodality*. Firstly, there is the issue of interaction with websites and with the graphical aspects of MOOs, generally speaking the way reading is done on screen. These are characteristics of what is called in Chapter 3 *Web literacy*. Secondly we have introduced two areas of *polyfocality*: opening a number of frames on a screen at a time; and attending

to both on- and off-screen activities simultaneously. The potential is created for *multitasking*. The concepts of web literacy, multi-modality, polyfocality and multitasking are discussed further in Part Two, Chapters 3 and 4.

2.4 *Webheads*: A virtual community?

We turn in the next section to the study of *virtual* communities which exist on the internet. The question is of the extent to which *Webheads* can be considered a community.

The notion of a virtual community gained currency when it was popularised by Rheingold (1993) in his book *The Virtual Community*. Rheingold made the observation there (1993:5) that: ‘...virtual communities are social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace.’ There is, however, an argument against the very existence of virtual communities, centring upon the question of whether to be a community it must have a geographical space. Weinreich (1997), for example, rejects the notion of virtual community, because, in his view, ‘... *community* is a collective of kinship networks which share a common geographic territory, a common history, and a shared value system, usually rooted in a common religion.’ A virtual community on the internet cannot, of course share a common geographic territory in the traditional sense. However, this particularly stable view of *community* is at odds with the perception amongst participants in CMC that when interacting in a MOO, for example, they occupy a virtual space (see section 2.3 above). At this point we explore the basis on which the *Webheads* group actually constitute a community. We begin with a brief catalogue of research which allows for the existence of virtual communities. There follows a discussion of the perception among *Webheads* members that they are part of a community. To conclude, we discuss four notions of community: speech community; discourse community; community of practice; and virtual settlement. These are relevant as we conceptualise what type of virtual community the *Webheads* group is, as it provides a context for the study of CMC discourse.

Much CMC research is carried out on groups, sometimes called communities, which exist only in the virtual world. Cherny’s (1999) ethnographic study of a MOO is a thorough, in-depth investigation of the linguistic behaviour of a community in a MOO. Davis and Brewer (1997) provide a book-length treatment of the linguistic characteristics of a virtual community of college students who interact in asynchronous CMC (email).

Rafaeli and Sudweeks' development of the concept of interactivity in asynchronous CMC which we referred to in sub-section 2.3.2 stemmed from a desire to investigate the factors underlying group cohesion in virtual communities (Rafaeli and Sudweeks, 1997, 1998; Rafaeli *et al.*, 1998). Turkle's *Life on the Screen* (1995) is a study of the psychological lives of individuals in virtual communities. Danet (1998) notes gender-switching patterns in internet chat rooms (IRC) which she describes as communities. Baym (1995a, 1995b, 1998) tracks the emergence of a virtual community which exists as an asynchronous CMC newsgroup dedicated to discussion of a soap opera. Other research notes difficulties in virtual communities: Barnes (2000) describes the problems which were faced by a virtual community after its members had met face-to-face. Kolko and Reid (1998) document the fragmentation of virtual communities.

Those who write about *Webheads* consider the group to be a community, as can be seen in the titles of papers and presentations by *Webheads* tutors: 'Developing a Community in Online Language Learning' (Stevens, 2000a); 'The *Webheads* community of language learners online' (Stevens and Altun, 2001); 'An online learning community: The students' perspective' (Coghlan and Stevens, 2000); 'Herding Cats: A Descriptive Case Study Of a Virtual Language Learning Community' (Steele, 2002). Reference is also made to the *Webheads* community on the website, in the interaction on the email list, and in the SCMC chat sessions. The first mention of 'community' in the logs of SCMC discourse text prepared as data for this study (see section 2.5 below) was made on 2 July 2000:

(2.8)

sophie: What do you mean a hard time ... what's going on???

sophie: I suppose this is a community joke

The notion of community had perhaps been extant though implicit until then.

This self-definition of community is similar to Korenman and Wyatt's (1996) 'experiential' definition of a group on the internet (1996:225-6): 'The experiential measure of "groupness" is the feeling of participants in the interaction that they are members of a group; a group is a group because it feels like a group.' Nonetheless, simply because a community is presumed to exist, it seems wise to test for the existence of community in *Webheads* using other, more objective criteria.

To begin with, we turn to a paper by a tutor with *Webheads*, Michael Coghlan (Coghlan and Stevens, 2000). Referring to *Webheads* as an online learning community, he notes the characteristics of such a community:

- Students care about each other
- People make friends in the class
- Students and teachers are friends
- Students are in contact with each other independent of class times or class activities
- Border between ‘instruction time’ and social time becomes blurred
- Ex-students maintain links with the class

He continues: ‘The point though is that in an online environment these aspects of community HAVE TO EXIST or the class will not succeed.’ In Chapter 8 (section 8.2) we discuss how these criteria for the existence of community reflect Coghlan’s own approach to language learning.

A firm basis of community for Coghlan is friendship. Here he comments on the types of message posted to the eclass:

... the majority of the traffic to the email list is not a direct result of teacher prompts to write. General contact or friendship building is the purpose of most messages. The melding together of the various members on the community happens because messages are posted REGULARLY, and members remain part of the community because of a sense of friendship and belonging to a group who have never met.

Coghlan’s definition of community is somewhat sentimental. For instance, friendship need not be viewed as a necessary characteristic of a particular community. This definition should therefore be distinguished from more academic definitions. The focus in this thesis is on the language used by members of the community, and at issue is the linguistic dimension of ‘community’. Three discourse-oriented perspectives on community are outlined here as they relate to the thesis: *speech community*, *discourse community*, and *community of practice*. We also introduce the notion of the *virtual settlement*, analogous to a settlement in archaeological terms.

2.4.1 Virtual speech community

Discussion of the notion of a speech community existing on the internet is preliminary to an understanding of electronic communicative competence. In Chapter 1 we noted that *electronic* communicative competence is required to participate effectively within a particular community. And at the beginning of Chapter 1 we quoted Hymes (1974:4) as he insisted on the community as a basis for linguistic description. Hymes’ concern was

with the *speech* community, and moreover, one whose members share a close geographical presence. Can the term *speech community* also describe a group of people who rarely if ever meet other than on the internet, and whose primary interaction is written? As has been stressed, SCMC is not a homogeneous entity. Groups which meet on the internet are also not linguistically homogeneous, and although there are some features common to most SCMC, all groups do not share the same set of discourse and literacy practices. One way of defining a speech community is with reference to rules of speaking which are shared by the members of the community and are not used by ‘outsiders’ (Saville-Troike, 1982:20). In this sense, the linguistic choices made by members of the group helps to define it as a community. In Chapter 4 there is a discussion of some linguistic and discourse conventions, also framed as *literacy practices*, in the *Webheads* group which help to unify the group as a community. (These practices are not spoken; they are, however, verbal.) What is more, discussion in section 2.3 of this chapter encompassed the notion of *dual* setting, whereby the online meeting place is perceived as a particular geographical space. In the 21st century the notion of speech community can extend to online groups if these conditions are allowed.

2.4.2 Virtual settlement

As an adjunct to the discussion of virtual speech communities, we may mention the notion of a virtual settlement, as proposed by Jones (1997). The existence of a virtual settlement demonstrates the corresponding existence of an associated virtual community (1997:6) and is analogous to the physical infrastructure of a community in Real Life. The criteria necessary for a virtual community to exist are: a minimum level of interactivity; a variety of communicators; a minimum level of sustained membership; and a virtual common public space. A virtual settlement, which the *Webheads* group demonstrably has in its various places and spaces, could be said to fulfil the ‘geographical space’ criterion of a speech community’s existence.

Brumfit points out the central role which linguistic choices play in a definition of community. He states (2001:135):

‘Language use only becomes problematic when there are languages and styles to choose from. Then, selection of language and style may result from, and also become a badge of, social differentiation. Indeed, we may go even further, and argue that whenever there is social differentiation, linguistic variation will reflect it. Thus, language users operate as communities through the linguistic choices they make.’

A supposition to draw here from the circularity of this position is that a speech community can only be said to include those who make the same linguistic choices, and

that such choices define the community. We might also refer to a definition of community which is non-linguistic; for example, one which exists through a set of shared aims. This is one starting point for discussion of *discourse community*.

2.4.3 Virtual discourse community

Related to *speech community*, though with certain subtle differences, is the notion of a *discourse community* (Swales, 1990). Amongst the characteristics of discourse community is a broadly agreed-upon set of public goals (1990:24).

With the *Webheads* group, such agreement may be hard to achieve. Although the *Webheads* group has a stated, authorised purpose (encapsulated in its subtitle on the *Writing for Webheads* homepage: ‘An experiment in world friendship through online language learning’), the actual function of interaction at any one time may not necessarily be – in fact is unlikely to be – purely referential and related to language learning.

Furthermore, the stated purpose of the group may not correspond to the reasons individual members have for joining in and persevering with interaction with *Webheads*. In one paper, Vance Stevens as the founder of the group says that *Webheads* gives participants opportunities to use and practice their English skills (Stevens, 2000a). And indeed, many members may have an expressed aim to practice English. For others, the purpose may be primarily social, or may include a wish to learn about the technologies of CMC. These other participants might include the numerous members of *Webheads* who are expert users of English, who would not need to practice English skills.

Cherny questions the usefulness of Swales’ distinction between speech community and discourse community with regard to another online group (1999:25):

Although technically the inhabitants [of the virtual community Cherny studied] correspond in writing, the highly interactive, non-persistent status of their texts – combined with the high degree of sociability above and beyond any stated rationale they might have for their community’s existence – makes them more plausibly a speech community than a discourse community in Swales’ sense.

In Chapter 8, section 8.2, we discuss in detail the *Webheads*’ members’ perceptions of how they benefit from membership, and what the purpose of the group might be.

2.4.4 Communities of practice online

Overlapping with the notions of *speech community* and *discourse community*, though also including *learning* within its definition, is the *community of practice*. A community of practice is a community dedicated to learning and advancing knowledge and know-how in a given subject area among its members (Wenger, 1998; Lave and Wenger, 1991). Communities

of practice, suggests Wenger (1998), are everywhere, and individuals belong to a number of communities of practice, including virtual ones: 'Across a worldwide web of computers, people congregate in virtual spaces and develop shared ways of pursuing their common interests' (1998:6-7). Wenger's definition of a community of practice is based on individuals' joint pursuit of all kinds of enterprise, resulting in interaction, mutual engagement and, in his terms, learning. 'Over time, this collective learning results in practices that reflect both the pursuit of our enterprises and the attendant social relations. These practices are thus the property of a kind of community created over time by the sustained pursuit of a shared enterprise. It makes sense, therefore, to call these kinds of communities *communities of practice*.' Practice is seen as the source of coherence of a community. The dimensions of practice, for Wenger, are mutual engagement, a joint enterprise, and a shared repertoire of ways of doing things (1998:49).

Research on communities of practice involves: '... close up analysis of face-to-face interaction in a number of rather well-established settings and social relationships like workshops, classrooms and professional groups of one kind or another' (Rampton, 2000:103). Virtual communities of practice differ from other virtual networks, according to Johnson (forthcoming): learning is the main goal, rather than socialising (social networks); task completion (virtual teams); or information exchange. Consideration of *Webheads* as a community of practice, with a shared repertoire of discourse and literacy practices, and where learning of some sort (the joint enterprise) is involved, would seem to be reasonable. The type of learning going on may be of many kinds: language learning, for example, or learning about the technologies of CMC. To these we can add learning about the specific discourse practices of the community. Cherny holds (1999:24) that: 'Certainly learning linguistic practices is a part of becoming a member of a community of practice.'

Finally in this chapter it is necessary to document the steps taken in the collection of data for this study. Note is made of certain ethical difficulties in the study of virtual communities.

2.5 Data collection and ethical issues

2.5.1 Participant observation of a virtual community

My own involvement with *Webheads* began in June 2001 when I posted a query about the use of synchronous CMC in language learning on the email discussion list *Neteach-L*. Part of that message is reproduced below:

(2.9)

My name is James Simpson and I am currently in the first year of a PhD in the school of linguistics at the University of Reading. I have been following with interest the discussions on CMC and its applications.

My own research is in the area of discourse analysis, CMC and language development. At this point in the research I am trying to identify and negotiate access to a group of learners of English who engage in text-based CMC, synchronous and otherwise. This general request is an attempt to find such a group.

In my study I am primarily interested in describing the development of learners' synchronous (and possibly non-synchronous) CMC discourse over time. The focus would be some or all of the following:

- Turn-taking/topic-maintenance organisation and pragmatics in synchronous CMC
- The role of paralinguistic and visual information in CMC
- Group interaction and participation in CMC
- Affective and motivational variables
- Differences across cultures
- The cultural and ethical dimensions of technology (and, of course, of researching on-line)

Vance Stevens invited me to examine the logs of the synchronous CMC sessions in a message dated two days later.

(2.10)

James,

You can have look at *Webheads* if you like
<http://sites.hsprofessional.com/vstevens/files/efi/Webheads.htm>

and the transcripts of logged chats (weekly since 1998) at
<http://sites.hsprofessional.com/vstevens/files/efi/chatlogs.htm>

Vance

I then started my study of the *Webheads* group and its associated discourse. I first participated in a synchronous CMC session at *Tapped In*, 8 August 2001. This was the occasion of the *Tapped In* summer carnival, where established groups hosted at *Tapped In*

put on demonstrations in a way analogous to a school or college open day. Some of the text from that session is reproduced as Appendix 1. I joined the email list (the eclass) soon afterwards. Extract 2.11 is my welcome message to the email list hosted by Yahoo Groups, on 12 October 2001:

(2.11)

Hi fellow Webheads

I'm James Simpson, and I've recently joined Webheads (JamesSi on the TappedIn sessions, together with a nice banana icon).

I'm first and foremost an English Language teacher, with an interest in - but little expertise in - learning and teaching with the help of technology. I'm currently taking time out from teaching to carry out research (at the University of Reading, UK) into the discourse of computer-mediated communication. I'm interested in the way we all use language when communicating in real-time chat. That's one reason why I'm so pleased to be a webhead.

The other reason is that it allows me to get to know some very interesting people in this global village of ours. At the moment I'm trying to take part in as many Sunday lunchtime (lunchtime where I am, anyway) chats as time allows. Sometimes it's not easy to make it, but we can try!

Part of my research involves looking at the logs of our chats. I'm very keen to share all my work with fellow Webheads, and will try to put any papers, articles, etc. on the website (Vance: I might need some help with that!) Send me an email if you want to know more about the research.

I look forward to meeting as many of you as possible on the Sunday sessions, and to talking again soon.

Before I forget: Happy birthday to Sharell and all others who've recently celebrated their birthdays.

All the best
James

Since then I have posted a number of contributions to the email list on the topic of the time, and have participated in many of the weekly synchronous sessions since October 2001. I have taken part in an online conference (ELT Online Conference, 11 November 2001) as a conference delegate and a member of *Webheads*. I have given an online demonstration of *Tapped In* and *Webheads* to the Corpus and Computers Research group at the University of Reading (5 December 2001). I have also been present at *Tapped In* on occasions when groups of learners have met each other online. I have discussed my research with reference to *Webheads* at a number of conferences and seminars since September 2001.

2.5.2 Data collection and preparation for this study

Data for this thesis derives from a number of online sources, the vast majority of which are associated with the *Webheads* group. The sources are listed and described here in order of frequency of reference in the thesis.

Logs of SCMC discourse text

The discourse of SCMC is the focus of this study, and naturally most data is from the SCMC discourse engaged in by *Webheads* members. The logs of text-based synchronous CMC interaction in the various spaces online are saved by *Webheads* members and archived on the *Webheads* site:

<http://www.homestead.com/prosites-vstevens/files/efi/chatlogs.htm>

The logs derive mainly from the weekly Sunday chats held in MOOs: first *The Palace*, then from February 2001 *Tapped In*. Also included in the *Webheads* archive are logs of chat from the messaging programs ICQ, Yahoo Messenger, and a number of sundry other text-supported voice and video conferencing tools.

A corpus of 150 consecutive logs was saved for this study and numbered S001-S150. The first, S001, was recorded at *The Palace* and dates from 11 October 1998. It is the first recorded chat from the *Writing for Webheads* group. The last, S150, was recorded at *Tapped In* and dates from 2 December 2001. In terms of size, the smallest log, S075, is just 579 words (52 individual turns), and the largest is S145: 16904 words; about 1900 individual turns. The corpus as a whole contains 742224 tokens, a total which includes all headers, annotations, and automatically-generated turns which appear in the data. Each log was copied from the archive and saved in 'plain text' format. We note the obvious but relevant point that in saving the text of the *Webheads* SCMC discourse in this way, many important aspects of communication are lost. Not least of these are the paralinguistic and graphic features of the SCMC host (MOO) interface and the dynamic unfolding of the text as it scrolls up the screen.

At points in this thesis, attempts are made to capture the multimodal and dynamic nature of SCMC discourse through the use of screen shots. It has been found important to do this (a) when reference is made to a graphical aspect of the discourse: for example, when participants refer to their avatars in a graphical MOO; and (b) when discussing coherence and cohesion in an environment where the text is only loosely cohesive due to the manner of its production. The advantage of saving the logs as text files for analysis are

nonetheless clear. Text files can be read easily, lending themselves to pencil and paper analysis; and can also be analysed using concordancing tools. Most analysis of the text of SCMC discourse (i.e. the saved logs) was carried out by hand on printouts of the data. On occasion the concordancing software package *Wordsmith Tools* was used.

Asynchronous CMC: The eclass

Apart from occasional reference, mostly in this chapter and Chapter 8, interaction in the email list is not dwelt on in this study. When reference is made, the data derives from the interaction in the eclass, archives of which are held at the Yahoo Groups site:

<http://groups.yahoo.com/group/efiwebheads/>

Internet Relay Chat and Messenger

At times, comparisons are made between the *Webheads* discourse and that from internet chat (IRC) and messenger programs. Such data was collected on various occasions between 2000 and 2002 from a variety of public chat rooms. The IRC chat text presented here is from a variety of rooms hosted by Microsoft's MSN, and the messenger text is from MSN Messenger. The common features of IRC and messenger discourse are that, as with the MOOs *The Palace* and *Tapped In*, communication is text-based, but takes place in real time, and that participants are separated by distance. Internet chat rooms are public, and each has a theme; most are light-hearted in content (hence '*chat room*'). This form of interactive written discourse was developed by Jarkko Oikarinen in Finland in the late eighties as a more immediate substitute for 'talk' on his bulletin board (Hentschel, 1998). It was until recently relatively specialised, confined as it was to UNIX (Eastment, 1999:9). Today, however, it continues to grow in popularity and is available to anyone with access to the internet, as chat software is included on the websites of many internet service providers (ISPs).

Incidentally, all UK and European IRC chat rooms hosted by MSN (Microsoft) are now defunct. Public disquiet regarding the perceived dangers of chat rooms is the ostensible reason for closing MSN chat rooms. There has also been recent growth in popularity and use of instant messaging programmes, including Microsoft's MSN Messenger. Instant messaging works on the same principle as IRC; however, participation is between interlocutors who are known to each other.

2.5.3 Data and informed consent

The necessity to gain informed consent from subjects when collecting data is now regarded as essential when conducting applied linguistic research in face-to-face situations. For example, the *British Association for Applied Linguistics Recommendations on Good Practice in Applied Linguistics* (1994; 1999: section 6.2) state that subjects of research: ‘... should be informed about all aspects of research that might reasonably be expected to affect their willingness to participate.’ However, when researching virtual communities online, a number of problems emerge. The issue of the lengths to which informed consent should be sought for the collection of data in this study is linked to the status of the data. The miscellaneous IRC data which appears in this study was taken from IRC discourse on public sites which could be considered public places on the internet. BAAL has this to say about observation in public places (1994; 1999: section 6.5): ‘Observation in public places is a particularly problematic issue. If observations or recordings are made of the public at large, it is not possible to gain informed consent from everyone. However, *post-boc* consent should be negotiated if the researcher is challenged by a member of the public.’ With regard to the use of data from internet chat rooms (IRC), participants are self-anonymised through the use of nicknames. What is more, an individual’s visit to a chat room may be very brief or transitory. Gaining informed consent by email is for all practical purposes impossible. The very fact of this anonymity and brevity of appearance can nevertheless afford protection. The same can be said for brief visits to *The Palace* or *Tapped In* while a *Webheads* SCMC session is underway. However the collection of data from the *Webheads* community nonetheless involves complexity. At one level, we can say that the data is in the public domain and is not of a sensitive nature. *Webheads* is a language learning community, and discussions are not personal or private. Furthermore, the logs of chat and email discussion are freely available for consultation by anyone visiting the home page. In fact, *Webheads* members and others are expressly encouraged to look at the archives as examples of asynchronous and synchronous CMC. But whether the logs should also be seen as freely available for analysis in a research project is a little more questionable. Schrum (1995) takes a conservative line on matters such as this, stating (1995:319): ‘... although it is possible to join a public discussion surreptitiously for research purposes, it is no more appropriate than taping a conversation without permission.’ Cherny (1999), while noting that most participants in MUDs and MOOs use character names rather than real names, suggests that using these character names in a research project is not enough to protect the

participants from an invasion of privacy (1999:311): 'Use of real character names can affect the MUDders' experiences in their community, e.g. if the researcher reveals information that they would not want their fellows to know.'

Rafaeli is less cautious in this area than either Schrum or Cherny. He says, (in Sudweeks and Rafaeli, 1995, quoted in Paccagnella, 1997:7): 'We view public discourse on CMC as just that: public. Analysis of such content, where individuals', institutions' and lists' identities are shielded, is not subject to 'Human Subject' restraints. Such study is more akin to the study of tombstone epitaphs, graffiti, or letters to the editor. Personal? – yes. Private? – no.'

For the purposes of this study, which makes no attempt to disguise the identity of the virtual community or its participants, the view has been taken that some degree of informed consent should be gained from individuals if their contributions to the community appear in the data. However, membership of *Webheads*, though more stable than many online communities, is also somewhat transitory, creating obstacles in the process of gaining informed consent. As Roberts (2000:6) says: '... isolating the participants in any online location can be difficult, for membership is fluid and collectively difficult to identify at any given time, with new participants joining daily and others withdrawing and then perhaps rejoining at a later time.'

After some debate on this issue both on the email list and during the synchronous CMC sessions, I sent an email to *Webheads* on 4 December 2001, the text of which appears on my personal web page and is reproduced as Appendix 2. I set out the options to *Webheads* thus:

(2.12)

I see three [*sic*] possible options:

Keep things as they are, i.e. treat the logs as a public resource and simply proceed with my study

Anonymise the logs, i.e. change the names of all the participants

Contact each participant individually to ask for written (email) permission to use their postings

Warn everyone as soon as I get online that I might be using the logs of the chat for research purposes.

I am prepared to do 1-3; 4 would be difficult if a) I wasn't there, and b) if I want to go back in time to early logs.

After consultation with Vance Stevens, I concluded that the third option is the most desirable. That is to say, an email is now sent to *Webheads* members if their contributions to *Webheads* appear in the data analysed for this study. This solution may not be perfect; it may be impossible to contact all *Webheads* members, and some may not respond to the email. Also, it will be impossible to contact any guest (non-member) who has taken part in the synchronous sessions at *Tapped In*. A further measure has now been taken: a message is now posted on the *Webheads* website informing participants that chats are logged and may be used for research. Given the public nature of the discourse, and the benign nature of most of the content, it is felt that these steps are adequate. Vance Stevens is assisting me in my endeavour to contact participants whose interaction appears in this thesis, and thus far, no participant has refused permission for their interaction to be analysed.

2.6 Conclusion

This point marks the end of Part One of the thesis; we have reached the stage where the main themes of the study, as well as the source of the data, have been introduced.

In this chapter we have met the virtual community which provides the contextual basis for a study of the discourse of SCMC. The online meeting places of *Webheads* have been described, and preliminary discussions of some major areas covered by this thesis have been undertaken. In particular, we have discussed themes relating to electronic literacy and electronic communicative competence (Part Two, Chapters 3 and 4) with the early discussions of features relating to multimodality and to identity. With the discussion of community and interactivity in *Webheads*, the issues of coherence and cohesion (Part Three, Chapters 5 and 6) have been introduced. And we have discussed briefly teaching and learning with *Webheads*, developed in detail in Part Four, Chapters 7 and 8.

Part Two is an investigation of the nature of electronic literacy. In Chapter 3 a broad consideration of the relationship between technology and literacy is accompanied by a discussion of the salient features of electronic literacy. And in Chapter 4 we return to *Webheads* with a chapter illustrating the areas introduced in Chapter 3.

Part Two: Literacy online

That the technologies of literacy have some effects on society, even on consciousness, is obvious and to deny this would be obdurate. But what those effects actually are is a different matter, as is the extent to which they are direct, or caused by the complex interplay of the technologies of literacy and the contexts of their use. Part Two of this thesis attempts to illuminate these concerns. Chapter 3 is a broad overview of literacy issues which begins with the origins of literacy in the ancient world and ends with the question of what it is to read and write in the *online* world. Chapter 4 sees a return to the *Webheads* group introduced in Chapter 2. We relate broad questions of literacy to what actually happens in the particular online environment under examination. The discussion in Chapter 4 ranges from participants' use of the textual features to engage in specific literacy practices, to the ways in which interaction allows for the exploration of aspects of identity online.

Chapter 3. Technology, literacy and electronic literacy

3.1 Introduction

In the previous chapter the main source of data for this study was introduced, along with the multimodal and temporal complexities of the computer-mediated communication (CMC) environments used by *Webheads*. This and the following chapter are devoted to a discussion of what it is to communicate in environments such as these. This background chapter is divided into two main sections. Section 3.2 engages with the debates concerning the relationship between literacy and technology, providing a backdrop for discussion of electronic literacy. There are sub-sections on the putative effects of the advent of writing on human consciousness, on the introduction of printing, and on the wider interpretation of literacy, that is, of literacy practices in society. Section 3.3, on *electronic* literacy, concerns reading and writing online. A discussion of multimodality and associated concepts is followed by sub-sections on reading the web and on communication using text-based synchronous CMC. The concluding section (3.4) links electronic literacy (particularly that related to synchronous CMC) with electronic communicative competence. The chapter as a whole is preliminary to investigation in Chapter 4 of some specific literacy practices employed by the *Webheads* virtual community.

3.2 The effect of technology on literacy

Among those who write about the effects of computer technology, there is a ‘common view’ which, according to Murray (2000b:43) is that: ‘... the computer will inevitably result in a different social consciousness of what literacy is and how it functions in individuals and society’. The basis of this tempting argument is the position that more established technologies of literacy, writing and print, had a unidirectional effect on literacy practices; at the extreme end of the argument, technologies are said to actually reshape consciousness in a process of technological determinism whereby: ‘... changes in the stimulus environment in and of themselves explain behavioural changes’ (Olson, 1985:3). This common view is based on interpretations of oral and literate cultures where the coming of literacy is said to bring about change independent of other changes already underway. Influential scholars who posit to a greater or lesser extent that technologies of

literacy act as autonomous agents of change are Ong (1982), Goody and Watt (1968) and, on literacy and print, McLuhan (1962). Identifying and examining the histories and effects of the development of literacy technologies is a complex and elusive pursuit, and one undertaken by others in much more detail than is possible here. Ong (1982) and Havelock (1963, 1982) approach the debates concerning orality and literacy from a technologically determinist angle. Coulmas (1989), Sampson (1985) and Harris (1986) give detailed accounts of the origins of writing, and Olson (1994) provides a coherent and engaging perspective on the relationship between speech and writing. Halliday's (1985) work covers similar ground in an accessible manner. McLuhan's (1962) *The Gutenberg Galaxy* is an insightful treatment of the nature of print literacy, perceived as ground-breaking at its publication. Eisenstein's two-volume work (1979) is a thorough account of the effects of the advent of printing on the world of the renaissance, the Reformation and the Scientific Revolution.

A full critical dissection of these interpretations is beyond the scope of this thesis. We shall, however, be examining certain aspects of the debate concerning orality and literacy as a means of establishing that although the introduction of new literacy technologies has profound effects, it has not acted in isolation of the broader social and institutional context. This will serve to remind us in the second section of this chapter and in later chapters that the effects of new literacy technologies depend in a large part on uses to which they are put.

3.2.1 Writing restructures consciousness?

The original development of writing illustrates the notion that technologies grow in response to the social and economic situation in which they operate. Writing systems developed when their precursors – pictures and mnemonic devices – came to represent words rather than things. Writing did not develop originally as a graphic device for representing speech, as had for so long been believed. For example Saussure's attack on the 'tyranny of writing' (i.e. on the written word as a model for language analysis) presumes that writing is an inferior method for representing speech: 'The linguistic object is not defined by the combination of the written word and the spoken word. The spoken form alone constitutes the object' (1916/1983:23-4). Rather, writing systems developed for record-keeping and as markers of ownership (Olson, 1994: Chapter 4).

As agrarian communities arose in areas such as Mesopotamia, the Nile valley, Central and

South America, and northern China, populations grew, and power structures formed. So the need came to augment spoken language with a new technology which could operate over distance and time, to fulfil novel social functional demands. The words in the early writing system of archaic Sumer (about 6000 years ago) were administrative inscriptions and lists of goods and commodities (Sampson, 1985; Olson, 1994). Gradually though, and once it had been established, writing took on some of the roles of the spoken word; firstly as a means of writing down what had been spoken (epic poetry, narratives, sacred texts) and then as a technology for composing. Writing also began to shoulder the burden of transmitting knowledge; hence 'education' in its modern appearance developed (Halliday, 1985).

So eventually writing became a system for recording speech and ideas. From this point it is relatively easy to make the leap of assuming that the technology of writing as a tool of literacy affects our cognitive abilities. As Pennington (2001:5) says:

[writing] ... has no doubt helped to promote the (at least partly independent) development of the cognitive side of language – and indeed, our cognitive abilities more generally – by making possible complex constructions of ideas built on a mountain or chain of 'captured' thoughts, which, when written down, can be increasingly probed and built upon. Once writing started to be used as a mode of recording speech and of communicating ideas independent of speech, we humans could make use of language independently of the mediation of either other human beings or the context of immediate experience. This made it possible to bypass the modalities and constraints of vocalisation and to instead express and develop our language and our (related) mental faculties internally.

The case for supposing that writing restructured consciousness is argued most clearly by Ong (1982) and Havelock (1963, 1982). The foundations of Ong's arguments in his influential *Orality and Literacy* (1982) can be located in Milman Parry's investigations of Homer in the 1920s. In his own revolutionary studies, Parry identified the poet of the Iliad and the Odyssey not as a traditional, that is written, poet but as an oral poet. That is to say, Homeric verse was composed orally because Homer lived in a society which was not literate: his was a primary oral society. And it is the nature of the verbal memory in an oral society, as opposed to the memory of 'chirographic and typographic folk', which so intrigued Ong. Parry (1971:415) describes a primarily oral narrative thus:

The singer of oral narrative rarely plans his sentence ahead, but adds verse to verse and verse part to verse part until he feels that his sentence is full and finished. The poet, with writing materials, can think leisurely ahead, but the singer, in the speed of his song, must compose straight out of fixed verses and verse parts until he comes to the point where one of his characters is to speak.

E. A. Havelock describes these oral techniques of verse composition in his *Preface to Plato* (1963:92-3) as being:

... built up of the following devices: there is a purely metrical pattern which allows successive lines of

poetry of standard time length to be made up of interchangeable metrical parts: second, a vast supply of word combinations or formulas of varying length and syntax ... [The poet's] overall artistry thus consists of an endless distribution of variables where, however, variation is held within strict limits and the verbal possibilities, while extensive, are in the last resort finite.

So Homeric poetry was constructed of pre-fabricated formulaic expressions from an extensive but finite repertoire. Parry's early work was continued by Lord, who showed that these cliché-like formulaic expressions of Homer were grouped around standardised themes (Ong, 1982:23, citing Lord, 1960). From this insight, Havelock and Ong drew the conclusion that these discourse patterns of primary orality effectively dictated the workings not just of poetic structure and narrative composition but also of intellectual thought and social structure; the poet-philosopher being primarily oral. As Havelock (1963:295) states: 'The first proto-thinkers of Greece [including Homer] ... were still poets. They had to do their thinking out loud so that their compositions could still be recited and memorised.' Following Havelock (1963), Ong states that:

Homeric Greeks valued clichés because not only the poets but the entire oral noetic world or thought world relied upon the formulaic constitution of thought. In an oral culture, knowledge, once acquired, had to be constantly repeated or it would be lost. Fixed, formulaic thought patterns were essential for wisdom and effective administration (Ong, 1982:24-5).

Ong (1982:34) after Havelock (1963) continues: '... in a primary oral culture, to solve effectively the problem of retaining and retrieving carefully articulated thought, you have to do your thinking in mnemonic patterns, shaped for ready oral recurrence. ... serious thought is intertwined with memory systems. Mnemonic needs determine even syntax.'

With the development of writing, thought was arguably no longer restricted by the constraints of memory to formulaic patterns structured around rhyme, rhythm and action. So a new form of discourse grew, moving away from the rhetorical patterns of oral discourse and towards a discourse which is based on reflection, analysis and beliefs (Havelock, 1982). The hypothesis developed by Havelock and Ong is in many respects deterministic; the technology appears, then its effects are seen in society. It is ironic that the influential works of Ong, a Jesuit priest, should adopt a position in determinism so close to that of Marx (1906).

In his examination of the Ong/Havelock hypothesis, Olson questions the direct and immediate effect of writing on thought. The general claim that writing freed thought from memorability is, he suggests (1994:241): '... somewhat undercut by recent work showing that most if not all philosophical discourse both then and in the Middle Ages was oral in form.' Nevertheless, in Olson's view, writing affects cognition in an

important way (1994:242): ‘Consciousness of words permits their distinction from the ideas that words express. Writing, therefore, gives rise to the idea of an idea and the mind becomes the storehouse of those ideas.’

At this point it is as well to remember that literacy and cognition are mutually influencing, and are inextricably tied to the broader social situation. Returning to classical Greece, the object of Ong’s attention, Murray (2000b:45) points out that:

More recent studies of Ancient Greece ... show how the existing technology of orality existed side by side with the new technology of literacy, each enriching the other. ... Such studies (e.g. Lentz, 1989) also show how the characteristics of logical thought which were claimed to be the result of literacy, were in fact precursors to its introduction. Writing merely amplified this already existing way of thinking.

Murray’s point reiterates an important theme of this chapter: that shifts in literacy practices are not necessarily caused by the introduction of a new technology. In the case of classical Greece, literacy was in fact quite limited in both its range and its immediate influence. Olson (1994:12) estimates ten per cent of Greeks being literate in Plato’s time, adding: ‘... classical Greek culture was primarily an “oral” culture, favouring the dialectic, that is discussion and argument, as instruments of knowledge and that writing played a small and relatively insignificant part. Consequently, it is unlikely that we can simply attribute the intellectual achievements of the Greeks to their literacy.’

It should thus be noted that even when orality and literacy coexist within a society, only certain sections of that society might possess a literate culture. Buchan (1972) quotes Lord (1960) who shows that: ‘While the presence of writing in a society *can* have an effect on oral tradition, it does not *necessarily* have an effect at all. That is to say, what is generally perceived as being a literate society may have an oral tradition unaffected by a written tradition. Studies of ballads in the then southern Yugoslavia (Lord, 1960) and in North-East Scotland (Buchan, 1972) have shown that over time, perhaps over a very long time, the patterns of the poetry of the oral tradition are eventually affected by the written tradition. Nonetheless, suggests Buchan, as soon as literacy is introduced into the oral tradition, the methods of transmission of the ballad do change. In the oral tradition, recomposing and re-creating according to traditional rhythms and handed-down patterns produced slightly different versions of the same text; when the singers of ballads could read and write, the effect was such that texts were simply memorised (Buchan, 1972:251).

In later parts of this chapter, we see how the more recent views of literacy allow for the interpretation of literacy as a set of situated literacy *practices*, which can be seen as compatible with an individual’s communicative competence as manifest in performance.

This is a move away from the more abstract notion of literacy which has been the object of discussion thus far in this chapter, that is, a general ability to read and write. Before that, and as a further foreshadow of the examination of *electronic* literacy, we turn to the effects or otherwise of the introduction of a more recent technology: printing.

3.2.2 Literacy and printing

According to Murray (2000b), the arrival of the printing press in medieval Europe was not the sudden cause of social change and changing literacy practices it is commonly thought to have been. As an analogy, Murray cites an example of a technology being used for different purposes: gunpowder, which was used for centuries in fireworks in China, and only found a use in weaponry when it was introduced in the west. Yet it is the case that prior to the advent of printing in western Europe, even the literate were largely reliant on oral transmission of ideas, and typography heralded a shift in this (Eisenstein, 1985; cf. Olson, 1994:241; Buchan, 1972 above). In McLuhan's words (1962:161): 'Typography tended to alter language from a means of perception and exploration to a portable commodity.' Printing has been an integral part of the history of western civilisation since the mid fifteenth century; while not the direct and immediate cause of social changes, it can be said that many such changes would not have taken place in the same way without print. It was not until the nineteenth century, for example, with the achievement of compulsory and free primary education, that print and policy enabled mass literacy in the western world. Though this shift to mass literacy occurred four hundred years after the invention of printing, it could not have happened without it. A second example is the transformation of the newspaper in the United States into 'an instrument of mass-information and mass-education' (Steinberg, 1961:321), when it became, in Steinberg's view, the most influential single factor in converting the diverse millions of immigrants into citizens of the USA. On a more abstract plane, Pennington also stresses the importance of printing and publishing on the world, in that it greatly increased '... the linkage of the words – and hence the minds – of individuals and communities which could communicate over increasingly vast stretches of time and space' (2001:6).

3.2.3 Ceci tuera cela?

The advent of writing in Classical Greece, the coming of the printing press in early modern Europe, and the late twentieth century explosion in the spread of computer

technology are all accompanied by a tendency to regard each new literacy technology as something damaging, if not dangerous.

Plato's concern was that the written word would have a deleterious effect on the memory. Speaking (in writing) through the mouth of Socrates in dialogue with Phaedrus, he describes how the invention of writing by the Egyptian god Theuth is received by his king, Thamus:

... your invention [writing] will produce forgetfulness in the souls of those who have learned it, through lack of practice at using their memory, as through reliance on writing they are reminded from outside by alien marks, not from inside themselves by themselves: you have discovered an elixir not of memory but of reminding. To your students you give an appearance of wisdom, not the reality of it; having heard much, in the absence of teaching, they will appear to know much when for the most part they know nothing, and they will be difficult to get along with, because they have acquired the appearance of wisdom instead of wisdom itself (Plato, trans. Rowe, 1986:275a-b).

The apprehension of Plato was that writing and literacy negatively alter both cognition and society. Thought is a fundamental internal matter, and writing, comprising external 'alien marks', can offer no more than a weak replica of the mind. The written word cannot act as a substitute for rigorous thought and the training of memory. However, as Ong notes (1982:80): '... to make his objections effective, [Plato] put them into writing. ... Once the word is technologized, there is no effective way to criticize what technology has done with it without the aid of the highest technology available.' This ironic paradox was not, presumably, lost on Plato. Yet writing was the new technology of his time, and perhaps the tremendous benefits of writing, that is, of storing and building on thought, had yet to become clear.

Later, with the coming of printed books, the concern among those wielding power was that society, power structures, and institutions would suffer damage at the hands of the new technology. In Hugo's *Notre Dame de Paris* (1830/1891) Frolo's assertion that *ceci tuera cela*, that the book will kill the old cathedral, was a nineteenth century illustration of the perception of the power shift that new technology represented to the medieval clergy. The cathedral represented the visual; the medieval fear was that the word would destroy the image. The extension of this justifiable concern was that bible printing would threaten the traditional power and privileges of the clergy (Eisenstein, 1985).

Plato's was a very ancient fear, as Eco says, but a misplaced one (1996:296):

Nowadays nobody shares these fears [that writing will destroy thinking], for two very simple reasons. First of all, we know that books are not ways of making somebody else think in our place; on the contrary they are machines that provoke further thoughts. ... Second, if once upon a time people needed to train their memory in order to remember things, after the invention of writing they had also to train their memory in

order to remember books. Books challenge and improve memory; they do not narcotize it.

Halliday (1996) claims that a significant effect of the invention of printing is that it: ‘... created the maximum distance between written and spoken text (1996:354). Writing was objectified by print; printing contributed to standardisation of English spelling and punctuation (Baron, 2000). Later we find that if the objectification of writing by print created a dichotomy, it is one which is now deteriorating. In simple terms, to bring us up to date (and to paraphrase Halliday, 1996:355), technology has allowed for a switch: the event of speech can now become the object, through recording. And writing, objectified by print, can become an event, through text-based synchronous computer-mediated communication (SCMC). In section 3.3 this aspect of electronic literacy, that is, the status of the writing of SCMC, is discussed in detail.

3.2.4 Literacy: a two-way process with profound effects

The apparent threats to thought, standards and society associated with the introduction of more established literacy technologies have modern day echoes in the uneasiness regarding the changes currently underway associated with the introduction of information and communications technologies (ICTs). The development of computer mediated communication (CMC) – email, internet chat, text-messaging and the like – is blamed in prescriptive circles and the media for a perceived ‘dumbing-down’ of language. Features noted are lack of attention to spelling and grammar, punctuation and capitalisation. For example, Lee (2003) presents the views of Judith Gillespie, of the Scottish Parent Teacher Council, views which might be termed by Kress (2003:4) as *culturally pessimistic*: ‘Mrs Gillespie said that the growth in popularity of mobile phone text messaging and the abbreviated words and symbols used for space reasons were contributing to a decline in the standards of English grammar and the written language’ (Lee, 2003). Concerns such as these are not entirely unfounded; new technology does represent adjustment, if not revolution. There are two related conclusions concerning the wider effects of the introduction of new literacy technologies.

Firstly, any perceived shift in how literacy is *done* (what can be termed literacy *practices*) is not caused uniquely by the introduction of a new technology through a process of technological determinism. Rather, there is a two-way interaction between a new technology and the broader social, historical and institutional contexts within which it operates. Furthermore, these contexts are not of course uniform, but are unique. In the

previous parts of this chapter the discussion has had a Euro-centric slant; this was the inevitable result of attempting to address such broad themes in so small a space. As we shall see in the following sub-section and in later parts of the thesis, the contexts in which literacy technologies operate help shape the scope and span of an individual's literacy as much as the technologies themselves.

This is not to deny the second conclusion: that there are transforming effects of new technologies. These effects extend to the language and even, possibly, to the mind. More established technologies are partly responsible for the original divergence and now potential convergence of speaking and writing (Halliday, 1985; 1996). With the advent of CMC, novel forms of language are enabled by the technology, as examined in this and later chapters. Furthermore, just as the coming of writing 'expanded our *cognitive world*, our access to other cognitive worlds and our ability to create new cognitive worlds' (Pennington, 2001:16), so communication mediated by computer may well have profound cognitive and psychological effects (Turkle, 1995; see also Chapter 4). ICTs and CMC may have a contributory effect on the changing way individuals view themselves and the world around them.

Hitherto we have been discussing literacy in the abstract sense of being able to read and write. In the following section I present a description of the social-anthropological view of literacy, which serves to inform further parts of this study.

3.2.5 Literacy and literacies

The ability to read and write does not exist in a vacuum. Literacy is something that people do in the contexts of social situations, and is apparent in an individual's performance. A view of literacy which takes into consideration social and cultural elements of literacy is the social-anthropological, or ideological, approach. Literacy in this tradition is more than an ability to read and write; it represents the ability to function in a particular contextual situation. This account of literacy will provide the foundation for understanding the changes currently taking place in literacy practices which are associated with CMC and ICTs. This description is largely compatible with a definition of discourse in its broad sense of text and context together (Cook, 2001:4) and also with the study of an individual's communicative competence within the context of the community outlined in Chapter 2. We return to the matter of communicative competence at the end of this chapter.

Those working from the social-anthropological approach assert that literacy is not a sterile, context-free concept; rather, in Murray's words (2000b: 44): '... literacy is a socio-cultural phenomenon that reflects a community's values; they [researchers in the social-anthropological tradition] have shown that literacy is not a set of skills, whose absence or presence in individuals or communities automatically leads to particular outcomes ...'. Street, a leading exponent of the 'new', or social-anthropological, literacy movement, warns us (1993:1):

... to be wary of assuming a single literacy where we may simply be imposing assumptions derived from our own cultural practice onto other people's literacies. Research in cultures that have newly-acquired reading and writing draws our attention to the creative and original ways in which people transform literacy to their own cultural concerns and interests.

One might say the same for newly-acquired computer-mediated communication skills, as we see in Chapter 4.

Street and others in the tradition use ethnographic methodology in their research, as only by examining normal everyday output and local genres can they, claims Street (1993:2) '... have a basis on which to compare the role of affect in spoken and written communication.' This emphasis on data which is not restricted to artificial settings and is collected with a keen appreciation of context leads to thorough descriptions of literacy practices within the situations under consideration.

In a social-anthropological view of literacy, the concept of a 'divide' between literacy and orality is considered invalid (Street, 1995). In a broad view of literacy (in Street's terms the *ideological* model), the way in which literacy operates as cultural practices within defined contexts renders even a continuum (with orality at one end and literacy at the other) too general for any purpose than to outline prototypical temporal relationships. And Street is right. The great range of forms of both spoken and written language in the myriad different contexts of use exposes the limits of a divide or continuum; speech is not always ephemeral or situation-bound any more than writing is always permanent or displaced. Compare, for example, the impermanence of the scribbled note '*back in 5 minutes*' on a corner-shop door with the careful delivery of a presidential address. There is something typically speech-like about the written note: one can imagine it being spoken. By the same token there is something typically written about the president's speech, which was certainly composed in writing. As Street contends (1993: 4): '... spoken and written activities and products do not in fact line up along a continuum but differ from one another in a complex and multidimensional way both within speech communities

and across them.’

In the social-anthropological approach to literacy the distinction is made between an autonomous and an ideological model of literacy. The autonomous model views literacy as something which ‘... can be defined separately from the social context’ (Barton, 1994:25). Street associates it with technological determinism, citing Olson in his earlier work as its most explicit exponent. Olson (1977, quoted in Street, 1993:5) argues that ‘there is a transition from utterance to text both culturally and developmentally and ... this transition can be described as one of increasing explicitness with language increasingly able to stand as an unambiguous and autonomous representation of meaning.’ Street also quotes Goody (1968) as saying that writing is potentially ‘an autonomous mode of communication’ (Goody, 1968, in Street, 1993:5). In contrast, the ideological model is developed from a recognition that: ‘... literacy practices [are] ... inextricably linked to cultural and power structures in society’ and that researchers now ‘... recognise the variety of cultural practices associated with reading and writing in different contexts’ (Street, 1993:7). The position taken in this thesis is that an autonomous view is useful for the purpose of focusing primary attention on features which can later be considered with reference to the wider context in which language is actually used. This fits well with the argument advanced at the end of this chapter that it is possible to view literacy in this broader sense as correspondent with communicative competence as manifest in performance, while the skills of ‘narrow’ literacy (the ability to read and write) are aspects of that competence.

Within an ideological model underpinned by ethnographic research and with a concern for context, the concept of literacy is replaced with the term ‘literacy practices’ (Street, 1993; 1995; Barton, 1994; Baynham, 1995). In effect there are different types of literacy, different ways of using texts in different social contexts or situated interactions (Cook-Gumperz, 1986; Heath, 1983). Literacy practices for Street refer to: ‘... both behaviour and conceptualisations related to the use of reading and/or writing’ (1995: 162). Literacy practices are associated with the more focused concept of ‘literacy events’ (Heath, 1983) and the broader concept of communicative practices developed by Grillo (1986). In her influential ethnographic study of literacy practices, Heath (1982), after Anderson, Teale and Estrada (1980), defines a literacy event as ‘any action sequence, involving one or more persons, in which the production and/or comprehension of print plays a role.’ There are two types of literacy event: reading events, ‘in which an individual either

comprehends of attempts to comprehend a message which is encoded graphically'; and writing events, where 'an individual attempts to produce these graphic signs' (Heath, 1982:386). In Grillo's model, literacy is one type of communicative practice within '... a larger social context, moving the emphasis away from attempts to attribute grand consequences to a particular medium or channel' (Street, 1995:163). In moving so far from a traditional view of literacy, we risk losing sight of what Halliday (1996) calls the *original referents*, reading and writing. Yet a social-anthropological approach to literacy practices which occur within a communicative context stresses that literacy is something done by individuals in communities for a reason. Olson, in more recent work, recognises this. In his discussion of the functionality of literacy, he states (1994:11): 'The notion of "functional" literacy, unless one addresses the question "functional for what" or "functional for whom," is meaningless.'

As previously stated, a social-anthropological approach to literacy is compatible with the concept of 'context' in discourse analysis, where context includes the participants in the discourse, their 'intentions and interpretations, knowledge and beliefs, interpersonal attitudes, affiliations and feelings' (Cook, 2001:4). It must be remembered that the concept of *context* in the anthropological view may well be much broader than *context* for most linguists and many applied linguists, even those working in discourse analysis. A criticism of ideological literacy in particular is that at its logical extreme, *literacy* can refer to 'effective participation of any kind in social processes' (Halliday, 1996:340, cf. Kress, 2003, Chapter 3). Street suggests that the ideological approach subsumes the autonomous; it '... does not attempt to deny technical skill or the cognitive aspects of reading and writing' (1995:161). If this is the case, it need not be a contradiction to say that the concern is with both the 'autonomous' or abstract literacy, and with the situated, contextualised, and specific literacies as they exist in a particular context. This balance is attempted in this thesis with reference to electronic literacy.

3.3 Electronic literacy

We saw in 3.2 that in the literate mind, speech modelled on writing forced attention onto the word, and so to the *idea of an idea* (Olson, 1994:241-2). The introduction of the technology of printing eventually enabled mass literacy. What then of the introduction and widespread use of information and communications technologies such as the internet and the www? The remainder of this chapter comprises a discussion of what

happens on-screen as it impinges on literacy. There follow four sub-sections. Firstly, in 3.3.1 we discuss the integration of multiple communicative modes under the heading of *multimodality and multimodal communication*. Secondly, we contrast the dominance of the written word in typographic literacy with the emergence of the visual (what Bolter, 1996:261, calls *the breakout of the visual*). Thirdly, we examine the changing relationship between speech and writing most starkly exemplified by text-based synchronous computer-mediated communication (SCMC). Electronic literacy in the form of SCMC allows our written communication to be based on a model of speech; in other words, speech now becomes the model for writing. In a way, the immediacy and ephemerality of the electronic medium has the effect of promoting a tendency towards writing which is speech- or sound-driven. And fourthly we relate these and other aspects of electronic literacy to the corresponding concept of *electronic communicative competence*. It is suggested that an individual's effective participation in communication in an online environment requires electronic communicative competence. This competence will include the development of skills related to electronic literacy.

3.3.1 Multimodality and multimodal communication

In the previous chapter we noted the interplay of the verbal and the visual on the computer screen when participants in the *Webheads* discourse use text-supported voice chat. This, it may be recalled, is the SCMC system that enables internet telephony with the interlocutors and other participants simultaneously continuing a text-based SCMC conversation in a separate frame on the screen. This compelling example obscures the fact that language is and always has been multimodal. Yet in the past there has been a tendency to treat aspects of language separately. For example, the linguistic nature of written text is conventionally studied in isolation from its graphic aspects. Departments of linguistics and typography are traditionally separate in universities.

The study of multimodality concerns the way that multiple communicative modes are integrated. This may be, for example, text with graphics and pictures, or speech with gestures. It is argued that there has been in the late twentieth century been a coming to prominence of visual communication (Kress and van Leeuwen, 1996; 2001), where the integration of multiple semiotic codes is becoming more explicit, particularly when compared to more traditional printed text. An example in Kress and van Leeuwen's book *Reading Images* (1996:28-9), shows the front page of the British tabloid newspaper *The Sun*,

juxtaposed with the far less visual *Frankfurter Allgemeine*. The example illustrates the ‘semiotic shift’ towards the visual in news media. It may be argued that contemporary multimodality stresses the interplay of the verbal and the visual at the expense of other communicative modes, and should more properly be referred to as *bi*-modality (e.g. Cook, 2003). The effects of bi-modality, or the double channel of written language together with graphical aspects of language called *paralanguage*, have long been recognised. Artists and visual poets have at least since third century Greece experimented with form and the possibilities of the graphic aspects of text (Seaman, 1981). In the *calligrammes* of Guillaume Apollinaire, for example, we can see that the idea of a message arriving via two or more different modes is not new. Lockerbie, in his introduction to *Calligrammes: Poems of Peace and War* (Apollinaire, 1913-1916/1980:10), notes that when the layout of a poem is not linear: ‘... the reader is forced to grasp the complex interrelationship of the whole in a global perception The reader is thus obliged to recognise that: ‘...understanding comes to him through a visual, as well as a verbal, communication of ideas.’

The effect described by Lockerbie can be seen in this poem, or *calligramme*, by Apollinaire:

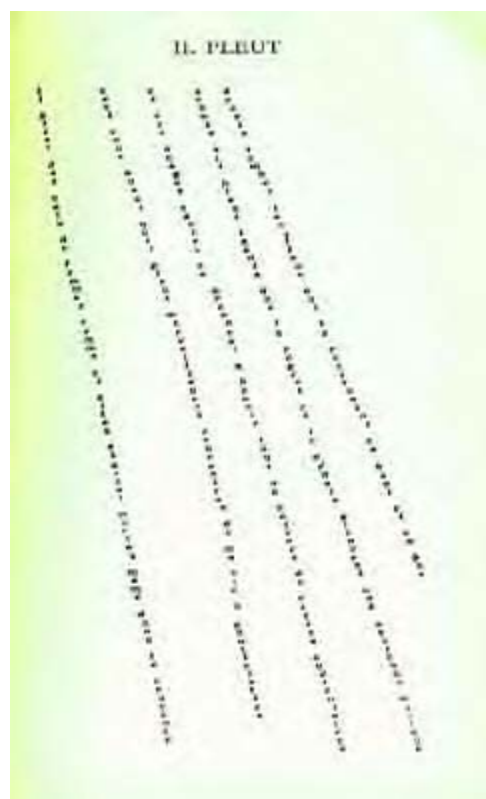


Figure 3.1 Il Pleut

The non-linguistic features of discourse are always extant, but in much traditional writing are not as obvious as in the poetry of Apollinaire or on the world wide web (www) and the internet.

CMC represents an excellent example of ‘the breakout of the visual’. And not just the visual but the oral and aural too. The organisation of the computer screen is increasingly based on non-linear and visual, rather than linear and textual, principles. And participants in CMC, as well as interface designers, recognise and make use of the possibilities of integrating video and audio into their communicative practices, as well as exploiting the potential of hypertext, which itself points to the need for a reassessment of textual and discourse organisation.

Much analysis of text-based CMC ignores the multimodal aspect of CMC discourse. In this thesis we are primarily concerned with text-based SCMC, rather than graphics, voice and video. The discourse text under examination is, as noted in Chapter 2, removed from its multimodal context for purposes of analysis. However, where necessary throughout the thesis, the multimodal nature of the discourse is given due attention. When participants in the discourse employ multimodal resources as part of their interactional repertoire, these cannot be ignored, nor can their significance be neglected.

An obvious manifestation of multimodality in CMC is the contiguity of the visual with the verbal, and their differing principles of organisation. Text tends to be organised in narrative form. Kress suggests (1998:68) that: ‘... the foundational questions posed by the organisation of speech [and by extension, text] are: What are the salient **events**?; in what **sequence** do they occur?’. The visual, by contrast, is a spatially and simultaneously organised mode (Kress, 1998:69):

... Its spatiality and simultaneity also lead to an underlying logic, namely that of the co-presence of elements and their relation. [...] Arrangement and display are the essential features of the logic of the visual. The implicit fundamental questions posed by visual representation are: What are the salient **elements**? In what **spatial relation** to each other do they stand?

It is important to note that on the computer screen, text, linear and narrative in nature, coexists with visual images, characterised by arrangement and display. Some of the functional load once carried by writing is being shouldered by visual images.

With messages so obviously and forcefully arriving multi-modally in the computer medium, it is not surprising that there is a growing interest in multimodal discourse analysis related to electronic literacy, ICTs and the new media. (A sample of recent work

includes Kress, 2003; Jewitt, 2002; Baldry, 2000, 2002; Baldry and Thibault, 2003; Hauck and Hampel, 2003, on multimodal discourse analysis; Kaltenbacher, 2002, on the multimodal analysis of language teaching CD-ROMs; Kress, Jewitt, Ogborn and Tsatsarelis, 2001, on multimodal teaching and learning; Bateman, Delin and Henschel, 2002, on multimodal corpus design in the analysis of genre; articles in Snyder (ed.), 1998; 2002; articles in Hawisher and Selfe (eds.), 2000). This is not to say that the analysis of written text together with its graphical and paralinguistic qualities is novel. For example, analysts of the discourse of advertising are duty-bound to attend to text within its non-linguistic context (for example, Cook, 2001; Myers, 1999).

Multimodal communication, multitasking and polyfocal attention

Finally in this sub-section we turn our attention away from the resources of CMC to their actual use. Linked to the concept of multimodal texts are three similar activities in which participants in CMC engage.

The first concept is *polyfocal attention* (Scollon, 1998; cf. *polyfocality* [R. Jones, 2002]), that is, paying attention to a number of different media and/or people at once. In his study of the literacy practices of a group of university students in Hong Kong, polyfocal attention is described by Scollon, who found that: ‘... in virtually all cases our students were reading while listening to CDs or tape recordings. Along with these the television is playing and often a computer with an MTV CD as well’ (1998:256).

Regarding CMC, we can see a similar thing. It is possible to have open a number of CMC programs simultaneously, and thus it is quite normal for participants in CMC to be continuing a number of computer-mediated conversations at a time. These might be any combination of text-based SCMC (IRC, MOO chat, etc.), email, audio or video CMC. Other simultaneous computer-related activity might be viewing web-pages by following hypertext links (surfing), carrying out a word-processing activity, or writing an email. And beyond the screen, there might be music or television. And of course, the participant might be carrying out a face-to-face conversation as well. So in addition to *attention* being polyfocal, the *communication* may be multimodal. Attention may also be polyfocal within one particular space on-screen. In Chapter 6 we see how participants in SCMC may partake in two or more conversations in parallel.

Scollon continues (1998:256): ‘It is particularly important to note that this condition of multiple and competing media discourses is considered [by the students] to be a good or

desirable condition, not something to be avoided.’ When examining the text of SCMC discourse, we frequently find instances where attention has been polyfocal, and where multimodal communication has been taking place. Carrying out different activities both on and off-line has come to be known as *multitasking*. Multitasking is common, and can be useful. For example, also in Chapter 6 we analyse a stretch of SCMC text where the activity is a tutorial for creating a website. This commentary is continuing *while* the website is in the process of being created.

As was stated in the introduction of this chapter, it is beyond this thesis to conduct a complete analysis of the multimodal communication and multitasking practices of the *Webheads* participants. We should nonetheless note that when we analyse the text of SCMC, it is important to recall that the participants may have been multitasking, or at least engaging in polyfocal attention, as the particular stretch of text under analysis was being produced. As Scollon says (1998:260): ‘... single focus and single discourse reception is the rarity, not the norm.’ In Chapter 4 we return to these matters with reference to examples from the *Webheads* discourse.

3.3.2 Web literacy: Reading in the virtual space

Participants in SCMC engage with the multimodal nature of on-line communication through the world-wide web (www). Web literacy – reading online – is thus central to their communication. The skills associated with web literacy comprise important parts of an individual’s electronic communicative competence (see below). Therefore addressing web literacy should be regarded as an important preliminary prelude to discussion of SCMC as it relates to electronic literacy in the next section, and to the dual consideration of electronic literacy and electronic communicative competence in the final paragraphs of this chapter.

The www is an enormous database of textual and visual material, connected nonsequentially through hypermedia links. Hypertext is a non-linear way of organising textual information. Hypermedia includes graphics, animation and sound, in addition to text. This section is concerned with the semantic dimension of visual and hypertextual structuring, that is the effect of web page design, hypermedia and hypertext links, and the choices which readers consequently have to make if they are to be, in Isbell and Reinhardt’s words, *web-literate* (2001:1). The discourse of the www, and the way in which users engage with it, is therefore another branch of electronic literacy.

The substance of the web, being electronic signals appearing as marks on a screen is different from that of traditional print (marks on a page). As the substance differs, so both the structure of the text and the ways in which it can be used also differ. Landow (1996:218) states that:

... whereas all previous forms of writing involve physical marks on a physical surface, in digital information technology writing takes the form of a series of codes. The resulting textuality is virtual, fluid, adaptable, open, capable of being processed, capable of being moved about rapidly, capable, finally, of being networkable – of being joined with other texts.

The technology, combined with web designers' application of the technology, allows integration of graphics and sound with text, enables screens to be split, menus to drop down and help to pop up. There is a tendency to bring information and on-screen controls, in the form of buttons and icons, to the surface, and an associated tendency to display this information graphically and non-hierarchically (Meskill, 2003). Someone familiar with the graphical user interface (GUI) of well-known operating systems will recognise that users are given graphical, layered cues rather than the text-based commands of older systems. The typography of web design is more important than traditional print- and page-based typography in helping the web designer to create the experience for the user (Fleming, 1998). The www emphasises the graphical and non-lexical elements of communication which have, as noted, always coexisted with text. Moreover, if the process of web design is influenced by non-traditional disciplines, so the understanding of the place of language on the www can be aided by the recognition that the visual plays an ever-greater role. The importance of this visual dimension has been highlighted by Kress and van Leeuwen (1996), who stress that: '... a knowledge of other semiotic modes can open up new perspectives on language' (1996:vii). It may be the case that the release from the book enables the graphic dimension to assume such importance. This is the view of Bolter (1996:261), already cited above, who claims that: '... the breakout of the visual has more scope in computer-controlled multi-media than in print, because computer applications do not feel the weight of the tradition of print.' It is supposed that Bolter may be referring to both psychological and physical weight.

In Chapter 2 the graphical interfaces of *Tapped In* and *The Palace* were shown. The following example, a screen shot of the *WebCT.com* homepage, demonstrates other possibilities that web technology opens up. The diagrammatically displayed site map is, interestingly, supplemented by more traditional hierarchical and alphabetical indices below and to the side. By clicking on any of the links on the site map the user can visit

the relevant page, from where further connections can be made, both to other pages and to email addresses. The fact that the web reader can get to the same place by navigating through an alphabetically-organised list suggests that the shift to the graphic is not complete.

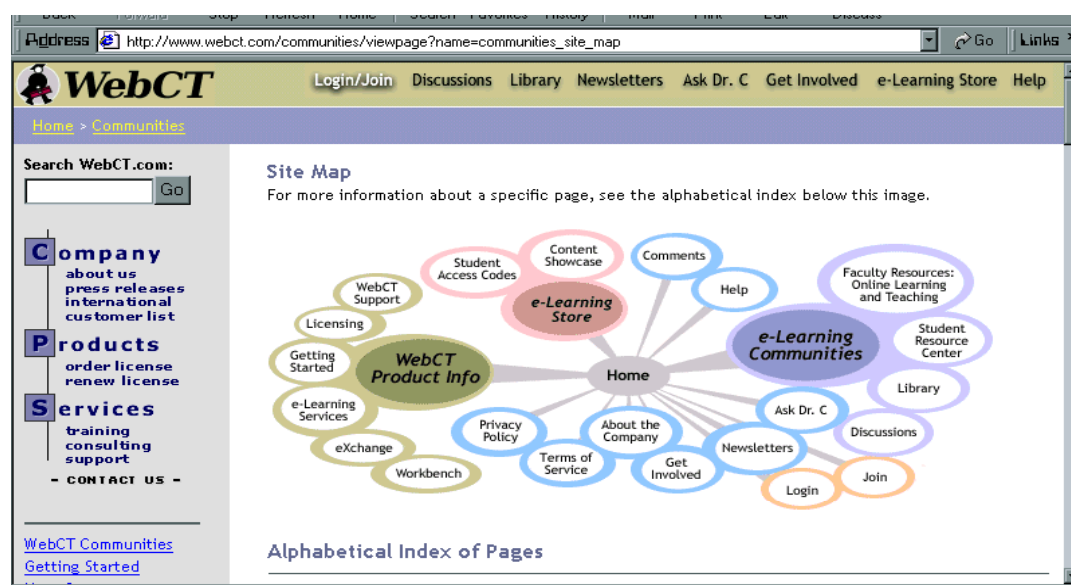


Figure 3.2 WebCT.com site map: Non-hierarchical display of links

These capabilities of web-navigation oblige one to think of engagement with the www as being dissimilar from traditional reading. As Bolter (1996:253) puts it: 'Like printing in the fifteenth century the computer today is a technology that challenges the traditional definition of the book.'

Because print literacy and the book have become so much an integral and interiorised part of life, at least in the west, there is a propensity to idealise the book, and to regard any perceived opposition to the book as a danger. This tendency is related to deterministic fears outlined in section 3.2 that the new technology will kill the old. Yet to some extent web pages and the www bear similarities with the technologies and institutions of print literacy. Landow (1996) points out that books, just as computers, are machines for handling text, and browsing on the www can be like reading books. Tuman (1996) suggests that the meaning of the term *reading* itself will increasingly take on the idea of browsing; the activity of moving through information (books, periodicals) in a library or bookshop is similar in some ways to browsing through web pages on the www. If this is so, the experience of sustained attention to a particular text will come to

represent the 'marked' form of reading. Nevertheless books can already be considered hypertexts in that one can open a book at any page; a reader is not obliged to start at page one and proceed in a linear direction. Systems of indexing and footnotes reinforce the hypertext analogy, and when one considers the cross-referencing system of a work such as Roget's Thesaurus, the analogy becomes yet more valid. And if web sites are books, then the www is an enormous library. At some point, however, the analogy breaks down; one can access the entire www without changing one's physical situation. It is tempting then to think of the www as something quite different and post-modern. In Johnson-Eilola's opinion, web navigation suits the post-modernist, as: 'Postmodernists are capable of working ... chaotic environments from within, moment by moment. Their domain is space rather than time. They exist with time, dancing across it, rather than being subordinated to it' (Johnson-Eilola, 1998:185). Certainly browsing on the www is a different sensation from that of reading a traditional book. From one page, the hypertext links can be followed in any number of directions to new pages, each with other links. The impression gathered is of exploring layer upon layer of pages, through a maze of links on a route of one's own design.

It is true that there are genres of printed writing that are not normally read in linear fashion. A thesaurus has been mentioned; encyclopaedias, dictionaries, directories, recipe books and atlases all lend themselves to non-linear attention. Incidentally, these are just the types of text that have made an easy transition from page to screen. But the difference between books and the www may be a difference in kind rather than degree. Kress (2003:136) notes that screens and pages differ in that there may be several possible 'points of entry' to the screen, while for the page in a book, point of entry is not in question, as: 'That matter has been settled by the conventions of the traditional printed page...'. The shift of written text from page to screen, and the changes it undergoes in the process, is an example of *remediation*. Remediation is defined by Bolter and Grusin (1999) as 'the formal logic by which new media refashion prior media forms.' Just as changes occur when a novel is filmed, so written text online differs from its printed counterpart when the visual, hypertextual and multimedia possibilities are exercised.

As a user of the www, one creates one's own texts, following a thread of layered, manipulable links. This thread can be salvaged; one can track back to previously visited pages in the cache, and one can store addresses of pages visited. But choosing which pages to visit, which to read, which further links to follow, is increasingly difficult as the

number of sites and possible links grows. Also users of the www must judge the quality of the material for themselves. Material on the www may have passed through editors, may in some way be 'authorised', but is just as likely not to have been. There is also the proclivity, which existed of course before the development of the www, to follow irrelevant links and become lost in insignificant detail. Heim (1992, cited in Richards, 2000:64) coined the term *infomania* for this tendency. So deciding what to read and what to attend to remain essential skills of web literacy, just as they are for print literacy, and in this respect web literacy is critical literacy.

Interaction with material on-screen, the ability to move, copy and otherwise manipulate text, the creation of unique routes through layers of web pages, to play interactive simulation games, and of course the opportunity to freely publish one's own material on the www also renders this area of web discourse to be unlike reading. Hawisher and Selfe display the confusion which results in applying the terms of traditional literacy practices to web literacy. As they say (1998:11): '... it is difficult to know when reading stops and writing begins since both occur in the same space often at the same time.' Tuman shows that the two do not merge in a traditional fashion; rather: '... online literacy will entail reading more than traditional texts, [and] writing will entail working with more than words' (Tuman, 1996:37).

Theorists such as Landow and Bolter cited in this section tend to present the hypermedia experience as being oppositional to print literacy. This opposition between hypermedia as open-ended and associative on the one hand, and print literacy as linear, sequential and hierarchical on the other, is somewhat overstating the case by not recognising that the reading of a traditional book can be other than linear. Many characteristics of web literacy also pertain to print literacy (books as hypermedia, the web as a library), though the technology has allowed for some fundamental differences to emerge (such as the question of where to *start* reading the screen).

We recall that autonomous literacy in the common view refers to a general ability to read and write. How must this position be adjusted when considering the skills of web literacy in the abstract? Rassool (1999:202) suggests that:

... in a world increasingly driven by (a) the need for innovation through research and development (R&D), (b) the multilevelled changes brought about in our everyday lives as a result of the nature and speed of technological developments, (c) the volume and range of information available, and its open accessibility, (d) the multimodal features of electronic text as well as (e) its interactive nature, we require significantly *more* than just the ability to read and write in a functional way.

Thus reading in an autonomous model of electronic literacy, with reference to web literacy, might include:

- reading text on screen, scrolling up and down as necessary
- following hyperlinks and using visual icons to navigate within a site
- altering the layout of the frames on the screen, making them bigger, smaller, invisible
- leaving the site altogether to visit a different site.

So linear text still has a central place, but the simultaneity of the visual representation and the possibilities of hypertext are important aspects of electronic literacy, as is deciding what to attend to. And we should not forget that the www allows anyone to become an author.

Web literacy practices

Turning briefly to situated web literacies, a number of recent studies in the social-anthropological tradition of literacy research concern culturally-specific web literacy practices. Of particular note are papers in Hawisher and Selfe's (2000) collection *Global literacies and the world-wide web*. This collection offers, say the editors: '... a vision of the web as a complicated and contested site for postmodern literacy practices.' In Chapter 7 we review a number of studies which concentrate on internet and www use in specific language learning contexts. In Chapter 4 we examine aspects of the interplay of SCMC technology and participants in a particular context – that of the *Webheads* community of language learners and teachers.

3.3.3 Text-based synchronous CMC: Writing in the virtual space

In Chapter 2 can be found some preliminary comments on the nature of text-based synchronous CMC discourse (SCMC). In this section we discuss the status of SCMC as a novel discourse type, akin to, but distinctly different from, both speech and more traditional forms of writing. And in Chapter 4 we continue the discussion with reference to the *Webheads* discourse.

At first sight, to propose a divide between language which is written and language which is spoken is a harmless truism. After all, writing and speaking are different activities, and it follows that the language produced also differs. The essayist William Hazlitt described the difference between speaking and writing: 'The great leading distinction between

writing and speaking is, that more time is allowed for one than the other; and hence different faculties are required for, and different objects attained by, each' ([1820]1998:140).

The existence of text-based synchronous CMC requires a reconsideration of the divide between spoken and written language. SCMC discourse is not face-to-face spoken communication, but nonetheless takes place in real time, like speech. The sense that SCMC is in some way a hybrid of speech and writing, or that it bridges the divide between the two, drove much early research into the discourse type. One can understand why when the characteristics of SCMC are summarised:

- SCMC is text-based human-human communication via computers
- SCMC discourse happens in real time, i.e. synchronously
- turns in the forms of SCMC under discussion in this thesis cannot be seen by other participants until they have been sent.
- participants can scroll back and forth to re-read previously sent stretches of discourse text.

Of course it is possible to roughly and partially represent the paralinguistic of speech (voice quality, loudness, body language, facial gestures) and the prosodic systems of speech (intonation, rhythm, phrasing and pausing) in writing. Punctuation and capitalisation allow for the limited representation of voice quality and volume (CAPITALS and exclamation marks!! for voice loudness; **bold** and *italics* for word stress; commas, and suspension dots ... for phrasing and for pauses). In written dialogue, lexical commentary (e.g., 'she said in a hushed voice') as well as description can overcome the deficiencies of writing when reproducing the non-lexical features of spoken face-to-face communication. The typographic dimension also carries information concerning the reading of a text. Candlin, in his introduction to Walker (2001:xvii) points out that: 'the study of Typography disturbs our conditioned concentration on the messages of wordings by asserting the importance of the messages carried by the writing and the characterisation, compelling us to grasp form and shape as central contributors to our understandings' (see the example of a *calligramme* in 3.3.1 above). Writing nonetheless cannot be considered a simple system of transcribing speech (see section 3.2), and decoding writing is a technically more difficult, less natural (though internalised)

process than decoding the spoken word. As Olson (1994:7-8) states:

Writing systems capture only certain properties of what was said, namely, verbal form – phonemes, lexemes, and syntax – leaving how it was said or with what intention radically under-represented. The fact that visual signs can be routinely turned into verbal form obscures the fact that they can be verbalised in several, perhaps many, different ways by varying the intonation and emphasis and give rise to radically different interpretations.

The real time nature of SCMC prompts participants in the discourse to consider it as similar to spoken casual conversation. This inclination is reflected in commentary on the discourse type. Werry, describing the language of IRC, maintains that ‘... one can identify a common impulse: an almost manic tendency to produce auditory and visual effects in writing, a straining to make written words simulate speech’ (1996:58). Motteram (2000:85) refers to IRC as ‘written conversation’, and Chun (1994:290) believes that synchronous computer-mediated sentences ‘... strongly resemble what would be said in a spoken conversation.’

A number of observers of *asynchronous* CMC discourse, in particular of the language of email and bulletin board systems, noting its speech-like qualities, have attempted to place the discourse at a certain point on a continuum between prototypically spoken and written language with reference to certain characteristics supposedly representative of such prototypes (for example, Yates, 1996; Murray, 1988; Collot and Belmore, 1996; Gains, 1999; Davis and Brewer, 1997). In the field of language learning, as we shall see in Chapter 7, similar work has centred on comparisons between face-to-face and SCMC discourse (Kelm, 1992; Chun, 1994, 1998; Kern, 1995b; Sullivan and Pratt, 1996; Warschauer, 1996; Swaffar, Romano, Markley and Arens (eds.), 1998; Patterson, 2001 *inter alia*). In work on the discourse of SCMC more generally, Ferrara, Brunner and Whittemore (1991), Condon and Cech (1996; forthcoming), and Segerstad (2003) have all attempted to relate linguistic features of SCMC to equivalents in spoken discourse. Murray (2000a), citing Yates and Orlikowski (1993) makes the important point that ‘the context of interaction ... influences the particular combination of linguistic and textual characteristics’ (Murray, 2000a:401). However, with close attention to the context of interaction, and without attempting direct comparison with spoken or written discourse, Cherny notes distinguishing characteristics of what she refers to as the MUD register of the MOO community. Such characteristics are novel, reminiscent of neither typical speech nor writing. They include syntactic and morphological features such as verb creations (‘Tom cools’ for ‘Tom says ‘cool’), contractions (‘Lenny bops you onna head’), deletions (‘Henry nods George’) and reduplication of words (‘Colm laughlaughs’)

(Cherny, 1999:86ff). Identification of novelties such as these lead one to consider the placing of SCMC discourse on a scale between prototypical spoken and written language as something of a red herring.

3.3.4 SCMC as a novel type of discourse

This is not to deny that SCMC discourse is not speech-*like*. Yet what makes it so?

The paradox of speech-like communication in writing is well-captured by Werry, as he describes the connection between the participant and the word in Internet Relay Chat (IRC) (1996:59):

When communicating on IRC there is a different sense of connection to the word; it does not belong to the speaker in the sense that the spoken word does. ... Through being embodied in electronic text, the speaker's words are depersonalised, stripped of all the material qualities that individualize them and connect them to a particular speaker. Yet at the same time, words exist in a temporal framework which approximates oral discourse, which requires interactivity and involvement, and which invites the fabrication of the texture and signature of an individual speaker's voice.

Kress (1998:54) argues that: 'informality of language in general and of speech in particular is a factor of social proximity.' When participating in SCMC, 'in the temporal (if not spatial) co-presence of one's interlocutors ... [one is put]: 'in a situation somewhat typical to that of the use of speech' (Kress, 1998:54). Kress is in fact discussing communication via email, though his comments hold as well for SCMC. He concludes (*ibid.*): 'It is this remaking of the social situation which then reshapes language in the direction of speech-like form.'

We find in this thesis that certain distinctive characteristics of SCMC discourse are attributable to the complementary effect of (1) social proximity online, as suggested by Kress (1998), and (2) technological or system features. As we shall see in Part Three, Chapters 5 and 6, there are some features of the computer medium which serve in part to shape the discourse. They also act as potential, if not actual, constraints on the interaction (see, for example, the overlaps caused by lags). Typing speed has a delaying effect, somewhat counteracted by the use of acronyms and abbreviations, and a disregard in most SCMC environments for the conventions of spelling, capitalisation and punctuation.

Halliday (1985) notes that there are different functions for which writing and speech are more appropriate. We can say the same now for SCMC, and for CMC in general. For example, it has emerged that CMC, both asynchronous and synchronous, is particularly

appropriate for the creation and maintenance of friendship ties (the *interpersonal* metafunction in Halliday's terms). Communication via email has in some sectors replaced the personal letter, and the popularity of IRC and its less public equivalent, instant messaging, is not in doubt. On the other hand, a type of CMC has been demonstrated a wildly inappropriate medium for transmitting certain types of message. In June 2003 in the UK, employees of a large personal injury firm, Accident Group, were notified of their impending redundancy in the following way: 'A text message on their mobiles told them an expected pay day had been cancelled and to ring a phone number that played another message ... saying they had lost their job' (Inman, 2003). One resultant expression of disgust was the looting of the company's offices by employees. In Chapters 7 and 8 we extend the discussion of discourse function as we consider learning with SCMC.

Finally in this section on SCMC, we introduce the question of identity online. In the study of electronic literacy, the role of identity, including issues surrounding role relations, is key. Donath (1999:29) discusses identity in virtual communities:

Identity plays a key role in virtual communities. In communication, which is the primary activity, knowing the identity of those with whom you communicate is essential for understanding and evaluating an interaction. Yet in the disembodied world of the virtual community, identity is also ambiguous. Many of the basic cues about personality and social role we are accustomed to in the physical world are absent

Donath is correct about the absence of cues from face-to-face communication in online discourse. Yet the levels of support and friendship which can be engendered in virtual communities are also well documented (see, for example, Rheingold, 1993; Cherny, 1999; Wellman and Gulia, 1999; Baym, 1995b, 1998; Turkle, 1995). A possible explanation for the development of intimacy and close friendships in online environments where aspects of identity are concealed or possibly altered may lie in the very absence of 'cues about personality and social role'. A feature of CMC discourse which is often remarked upon is *flaming*, that is, the sending of abusive messages via email. Sproull and Kiesler (1986) suggest that occurrences of flaming can be explained by the lack of cues from face-to-face spoken discourse, combined with the tendency to post messages without reflection on their content or possible effect on the addressee. The same lack of cues, suggest Moran and Hawisher (1998), can also be employed to explain unexpected levels of intimacy in a contextually-impooverished medium. That is to say, people become intimate precisely *because* the medium lacks the paralinguistic cues of face-to-face conversation. This position is supported by Herring (1999) in her discussion of *hyperpersonal* interaction

in IRC. That is, the lack of 'real life' features of interaction and the accompanying responsibilities allow participants to move quickly to positions of social intimacy. Although cues from face-to-face discourse are lacking in SCMC, medium-specific cues exist which enable participants to ascribe various roles and other elements of online identity to one another. These include naming practices, the use of 'profiles' (small files containing mini-biographies), and in visual MOOs, the creation of moveable characters, *avatars*, which represent the individual participant on screen (see section 2.3.3). These questions of identity online are addressed in further detail in our investigation of literacy practices in virtual communities in Chapter 4. In Chapter 8, role relations between the learners and tutors of *Webheads* are also examined.

3.4 Conclusion: SCMC and electronic communicative competence

Earlier in this chapter we suggested that a study of literacy practices is compatible with a consideration of communicative competence. Thus the concluding section relates electronic literacy to the notion of *electronic* communicative competence (Hymes, 1972a; Canale and Swain, 1980; Saville-Troike, 1989).

The connection between electronic literacy skills and communicative competence has been made explicitly by Chapelle (2001) and tacitly by Kramsch and Thorne (2002). Chapelle quotes Rassool (1999) in her assessment of the types of knowledge which 21st century language learners will need (2001:2):

If, as Rassool suggests, 'communicative competence refers to the interactive process in which meanings are produced dynamically between information technology and the world in which we live' (Rassool, 1999:238), language learners are entering a world in which their communicative competence will include electronic literacies, i.e. communication in registers associated with electronic communication.

Kramsch and Thorne also recognise that the notion of communicative competence requires some reassessment in the light of developments in ICTs and CMC (2002:100):

The challenge is to prepare teachers to transfer the genres of their local educational systems into global learning environments, and to prepare students to deal with global communicative practices that require far more than local communicative competence.

The notion of electronic communicative competence is addressed at various points in this thesis. Here, we outline a tentative proposal for a set of components of electronic communicative competence as they relate to the particular context of this study (the SCMC forums of the *Webheads* community). Points of reference are provided here to other areas of the thesis where the issues raised are explored in more detail.

The components of electronic communicative competence, adapted from the model of Canale and Swain (1980), include the following:

A knowledge of the *linguistic system*. It is not necessary, however, to be an expert user of the language of the community to participate effectively in SCMC. The speed of turn-taking is slower than in spoken discourse; participants can scroll back up the screen to re-read parts of the conversation, and logs of the text can be saved and studied at a later time. There are thus arguments for the use of SCMC in language teaching (see Chapter 7).

A knowledge of the *discourse patterns* involved. Later, in Chapter 6, a view of cohesion in SCMC is proposed which suggests that it operates to an extent through the organisation of various types of conversational floor. For participants, managing these floors and perhaps contributing to different floors in parallel, requires new skills. Regardless of one's level of competence in the language of the virtual environment, the ability to manage threads of SCMC discourse is a primary skill. This aspect of electronic communicative competence can be extended to include what Hauck and Hampel (2003) call *multimodal competence*. This is the ability to participate in a number of online and onscreen communicative activities at once. An example would be contributing to a voice conference while participating in text-based CMC. This can be seen in the introduction to Chapter 4.

A knowledge of the *technology*. This knowledge encompasses both access to the technology (the computer hardware and an internet connection) but also a technical knowledge enabling a participant to download particular software, to log on to the system, and to join a virtual community amongst other things (see Chapter 2).

A knowledge of the *sociocultural rules* of a particular virtual community. Not all virtual communities are the same. The final aspect of electronic communicative competence includes a knowledge of the roles of participants, the topic range expected in the context, and the broad purposes of communication in the context. Hymes' parameter *appropriacy* is subsumed by this aspect of electronic communicative competence. Hymes framed this aspect of knowledge and ability for use thus: 'Whether (and to what degree) something is *appropriate* (adequate, happy, successful) in relation to a context in which it is used and evaluated' (1972a:281). In Canale and Swain's (1980) model, for an utterance to be deemed appropriate it should conform to the sociocultural rules of use (1980:30): 'The

primary focus of these rules is on the extent to which certain propositions and communicative functions are appropriate within a given sociocultural context depending on contextual factors such as topic, roles of participants, setting, and norms of interaction.'

To be literate in the future will mean to be literate in electronic media. This is commensurate with a need to acquire communicative competence with technology. In addition to development of the skills involved with face to face speaking and listening, and traditional reading and writing, a literate person needs, therefore, to develop the skills and strategies involved in computer mediated communication and web literacy. In Chapter 4 below, we focus on the electronic literacy practices of a particular community as we explore some discourse features of the *Webheads* virtual environment.

Chapter 4. Literacy and SCMC discourse

4.1 Introduction: Electronic literacy in a multimodal environment

As we saw in Chapter 3, interaction in SCMC can be polyfocal and multimodal. That is, participants may be attending to more than one conversation at a time, which might involve text, voice or video, or a combination of these.

Below is reproduced a screenshot (figure 4.1) taken by Vance Stevens and appended to the *Webheads* chat logs, of an instance during the interaction with students during the practice session for the MLI Teacher to Teacher conference, Abu Dhabi, 7 November 2001. This particular session is discussed with reference to types of learning with *Webheads* in Chapter 8. The screenshot allows us an insight into the type of communication continuing at the time.

Open on the screen are three text-based SCMC frames and two webcam views. The text-based interaction is from *Tapped In* (in the background), *Yahoo* video conference (bottom left) and *Yahoo* Instant Messenger (top right). The voice mode of the video conference is also active, as seen by the highlighting of the 'talk' button in the video conference frame. The webcam views show what can be seen by Vance's and arif_altun's webcams.



Figure 4.1 Multitasking online

There is no recording of the voice chat, though the corresponding text from the text-based SCMC conversations going on is reproduced in example 4.1 below:

(4.1)

<i>Yahoo</i> voice conference I	<i>Yahoo</i> voice conference II	Tapped In
arif_altun2001: /to Vance will you wave at us, please vance_stevens: ok arif_altun2001: yes	an_lian: great limei, nice to meet you. an_lian: limei, say anything that is in your mind, don't be afraid of making mistakes. an_lian: great english vance_stevens: The voice is breaking up here because my computer is doing too much vance_stevens: I'm viewing Rif's camera in Turkey	VanceS asks, "I can see one of rif's students. Can you see me?" monitor [guest] says, "s there anybody" mouse [guest] says, "we are here monitor" efl [guest] says, "we can not be seen from the web cam because we are on an another line"

The text in *Yahoo* voice conference I corresponds to the webcam view of Vance waving. In *Yahoo* voice conference II, we can see part of two floors: an_lian encouraging limei to speak in English, and vance_stevens providing a commentary of his current experience. The *Tapped In* text is also background commentary.

The difficulty of describing multi-tasking and multimodal discourse online is highlighted here. We only have access to screen shots and to logs of the text-based SCMC, but have no record or transcript of the spoken interaction continuing at the same time. We do have, however, an illustration elements of an individual's electronic communicative competence. In this case, these elements are (a) the technical knowledge and ability to access and use the CMC tools required, combined with (b) the discourse knowledge and ability to continue three written conversations and one spoken conversation at one time, along with the use of gesture for communication (Vance's wave). We have already (in Chapter 3) referred to this element of electronic communicative competence as online multimodal competence.

What follows is an exploration of text-based SCMC, which for its participants exists as but one part of the multimodal CMC landscape. Analysis in this chapter is of logs of SCMC discourse text, primarily from the 150 logs of *Webheads* discourse text described in Chapter 2, with occasional reference to IRC discourse and interaction on the chat forum *MSN Messenger*. The chapter as a whole investigates ways in which participants in SCMC discourse make use of the possibilities afforded by synchronous written interaction in virtual environments. These can be considered *electronic literacy practices*, as described in Chapter 3. We begin in section 4.2 with techniques for representing paralinguage,

prosodics and reciprocation in SCMC, particularly in the SCMC environments of the *Webheads* virtual community. Some such features relate directly to their face-to-face equivalents, while others are novel to the discourse type. Section 4.3 is a study of SCMC features called *emotes*. Emotes, usually expressed in the present tense, are used to commentate on thoughts and supposed actions online. Sections 4.4 and 4.5 extend the investigation into interaction in ‘an inherently playful medium’ (Danet *et al.*, 1998:44). In 4.4 we identify and comment upon occasions where types of interaction called *hyplay* (Cherny, 1999) occur. These are instances of interaction akin to roleplay in the virtual world of IRC and MOOs. In 4.5 the focus is on the possibilities in SCMC of developing aspects of identity online.

It is unfortunate that both space and time preclude further exploration of these areas of SCMC discourse, each of which invites more sustained attention in future studies.

4.2 Paralanguage, prosodics and reciprocation in text-based SCMC

We begin with the question of how far the discourse of SCMC involves attempts to reproduce features of spoken discourse.

4.2.1 Emoticons: The paralanguage of face-to-face communication in text

Viewed sideways, the symbol :-) is considered to resemble a smiley face. IRC, mobile phone text messages and emails are often peppered with smiley faces, frowns and so on known as emoticons (emotional icons) which are used for non-verbal expression. We begin this section with a brief consideration of the use of these surface features which are now commonplace in electronic communication.

The smiley has evolved from the peace symbol of the 1980s acid house generation. Its use is endemic in the computer medium, to the extent where it is the default setting on a word processing program (Microsoft *Word*): when I type a colon : followed by a close bracket) the symbol ☺ appears.

The following screen shot shows emoticon use in an *MSN* chat room (now closed) devoted to their airing:

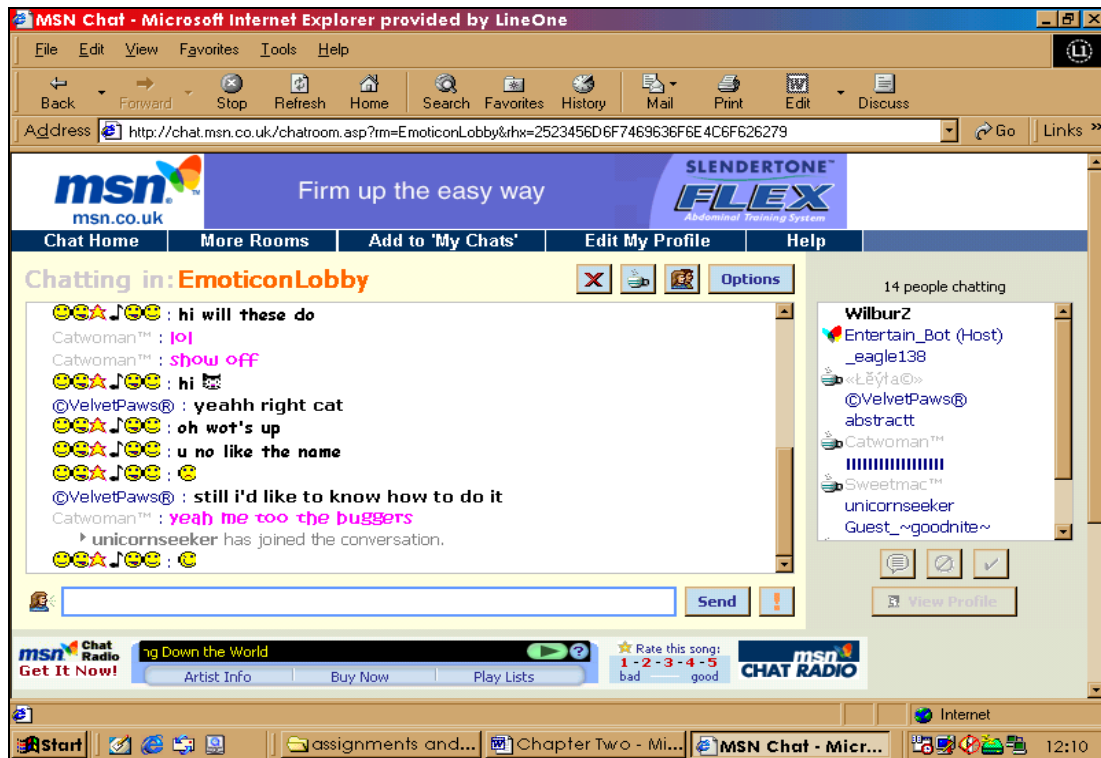


Figure 4.2 Internet relay chat showing emoticon use

Along with the smile and frown have developed a range of other emoticons: :-D :-P :-o and ;-) amongst them. These paralinguistic forms can be viewed as makeshift and rudimentary. Crystal (2001), describing the 'desperate attempts to create features of speech in writing' refers to emoticons as 'crude and limited expressions of emotion, and not very common.' Internet user guides also frown on their use. Kennedy (2000:471) suggests that: 'The odd smiley might have its use in diffusing barbs but whether you'd want to use any of the others is up to your perception of the line between cute and dorky.' However, they are much used in social CMC, particularly that engaged in by younger people, and might be viewed as both creative and innovative. In the screen shot above, of interaction in a chat room where the ludic function of communication is at the forefront, they are used as a nickname, as a rebus device for a nickname (in the fourth turn of the sequence the 'cat' symbol is used for 'Cat(woman)'), and in their standard role as representation of emotion (☺ and ☹).

Smileys have been used on asynchronous CMC bulletin boards (BBS) since the early 1980s. It has been claimed (M. Jones, 2002) that the first CMC smiley was used by Scott Fahlman on 19 September 1982, though it is equally likely that the coiner was unknown. An extract from the supposed original message is reproduced in example 4.2 below:

(4.2)

```
19-Sep-82 11:44      Scott E  Fahlman          :-)
From: Scott E  Fahlman <Fahlman at Cmu-20c>

I propose that the following character sequence for joke
markers:

:-)

Read it sideways.  Actually, it is probably more
economical to mark
things that are NOT jokes, given current trends.  For
this, use

:-(
```

With regard to emoticons, Crystal maintains (2001:39): ‘These features of Netspeak [i.e. internet discourse] have evolved as a way of avoiding the ambiguities and misperceptions which come when the written language is made to carry the burden of speech.’ The purpose of the emoticons in 4.2 was to indicate the presence or absence of a joke. However, it is often unclear exactly what :-) or ☺ and the variations might be taken to mean. As Crystal later points out (2001:36): ‘An individual smiley ... allows a huge number of readings which can only be disambiguated by referring to the verbal context.’ Smileys and emoticons may not necessarily represent attempts to make SCMC speech-like; they nonetheless serve more than a simple disambiguating or clarification role. Within the *Webheads* community they certainly have a broader range of readings than to indicate that humour is intended. The following unconnected examples from the log of one particular *Webheads* SCMC session might have interpretations ranging from (in order) happiness, cheekiness, regret, relief, eccentricity or shock (4.3, a-e).

(4.3)

```
a      VanceS says, "Saturday night still :-))"
b      SusanneN says, "Just wait and see :-)"
c      JoannaN says, "Yes, but I guess I'm too late. :-( "
d      JoannaN says, "It's o.k. :-)"
e      ArthurM says, "Yes, indeed - just lurking :-0"
```

Emoticon use is not uncommon among members of the *Webheads* community. The following table (figure 4.3) shows the use of various types of emoticons in the 150 logs (around 700 000 words) of SCMC sessions between October 1998 to December 2001.

symbol	instances of use
:-)	899
:)	248
:-(52
: (13
:-O :-o :-0 :-o) etc	29
;-) ;-o ;-o) etc	18

Figure 4.3 Emoticons in Webheads

Crystal concludes (2001:39): ‘... [emoticons] are brave efforts, but on the whole Netspeak lacks any true ability to signal meaning through kinesic and proxemic features, and this, along with the unavailability of prosodic features, places it at a considerable remove from spoken language.’ As we shall see below, in SCMC discourse are features which are at least analogous to the prosodic features of spoken discourse. However, Crystal implies that emoticon use is intended as an attempt to represent the paralanguage of face-to-face communication in writing. This is not a safe conclusion, suggesting as it does that SCMC discourse is a deficient version of a spoken conversation prototype. As with many features of CMC, what may have started as attempts to represent features of speech in writing have developed, as the medium has matured, into CMC-specific discourse features which are conversation-like, rather than speech-like.

4.2.2 Prosodics: Reduplication

In Robert Graves’ fantasy novel *Seven Days in New Crete* (1949) a man from the distant future asks a twentieth century Englishman: ‘Do I speak with correctitude?’ ‘With great correctitude,’ he is assured, ‘but without the modulations of tone we English use to express, or disguise, our feelings.’ These modulations of tone, interpreted broadly, are represented through inventive stretching of words and extended strings of punctuation marks in synchronous CMC. This is known as *reduplication* (Hentschel, 1998; Werry, 1996) or *adornment* (Rintel, Mulholland and Pittam, 2001). Notwithstanding the remarks made regarding emoticons above, reduplication is a device which often does relate to a spoken prototype. It can be seen in the following examples from different internet chat rooms:

(4.4)

- a Catwoman™ : HMMMMMM ANOTHER SPY
- b twİ\$ mÄÊÊÜpİÑyā : hmmmm
- c Guest_joey_jeremiah : errrrr
- d AinSophAur : Hmm did I miss some fun?

In the *Webheads* SCMC text similar prosodic representations can be found. The following four cases of reduplication were all produced by the same person during one SCMC session:

(4.5)

- a JohnSte says, "hmmmmmm."
- b JohnSte says, "hmmmmmm."
- c JohnSte says, "Hmmm. looks familiar."
- d JohnSte says, "hmmmmmm."

This selection of reduplications were also from just one log:

(4.6)

- a VanceS says, "hmmm"
- b hdep65: hmmmmmmmm
- c MargaretD says, "mmmmmmmm"
- d MargaretD says, "mmmmmmmmmmmm"

As with emoticons, the meaning of reduplication is ambiguous if decontextualised. And though reduplication of the kind above may attempt to represent humming, sighing, and so on, it has taken on many roles. For example, hmmm (with 'm' reduplicated any number of times) can, in the *Webheads* discourse at least, be used as a marker for interest (4.7), uncertainty (4.8), irritation or annoyance (4.9) or pause for comic effect (4.10).

(4.7)

- a JohnSte says, "Hmmm. Sounds interesting, Paul."
- b VanceS says, "hmmm, I haven't tried it yet."
- c BJB [HelpDesk] shows ArthurM the URL:
<http://www.tappedin.org/info/members/bj.html>
JohnSte says, "Hmmm. looks familiar."

(4.8)

- a BJB nods to Vance. You can join us by doing what I showed
 you or by clicking on community users
 VanceS says, "hmm I'm at all rooms and users but only
 have my own foyer"
- b aum [guest] asks, "hmm where's vance?"
- c DavidW says, "Closer to 15 C, I guess"
 VanceS says, "(double it, subtract 10%, add 32 ...)"
 VanceS says, "77 degrees"
 DavidW says, "Hmm, times 9/divide 5/+32"

(4.9)

PhilB says, "Hmm, it looks like I need to drive the kids to a
rugby match."
PhilB says, "Got to run, Ciao, y'all."

(4.10)

Felix [guest] says, "I tried to speak German.. But gave up..
Due to hnnnnnnnn laziness LOL"

These reduplications lend themselves to easy interpretation as representations of voiced interjections, filled pauses, and so on. As such, they are the most transparently 'speech-like' of SCMC features.

In the next sub-section we examine shared non-verbal behaviour as demonstrated by displays of reciprocation in IRC and in the *Webheads* discourse.

4.2.3 Reciprocation in IRC and with Webheads

Participants in SCMC use reduplication on occasion to reciprocate communicative messages. O'Sullivan, Hartley, Saunders, Montgomery, and Fiske (1994:157) suggest that reciprocation is a common quality in face-to-face interaction: 'It seems that we often seek some kind of balance in communication when speaking with our bodies. The major consideration is that of reciprocation, meaning the answering of another's body questions.' In our case the immediacy of the response, or the real-time nature of the interaction, encourages not only adoption of the strategies for representing non-verbal features of speech, but also reciprocation, which exists clearly enough in the prosodics of

synchronous CMC. Reciprocation, it seems, is a general conversational feature, not restricted to the spoken mode.

Reduplication for reciprocation is shown in the following extract, turns 1, 4, 5 and 6, from a French language chat room. The reduplication seems to represent drawn out and expressive intonation:

(4.11)

[illegible]

The outstanding feature in this series of turns is that pimousse6 reciprocates the general greeting of diamont_PF. In turn 1 diamont_PF enters the chat with her or his extended reduplication of the vowel 'u'. Pimousse, engaged in another conversation, drops everything to greet diamont. Interestingly, Pimousse chooses the 't' to reduplicate, rather than the 'o' or the 'n', which would correspond more closely with the voiced phoneme of its spoken equivalent (suggesting that this is not just a simple attempt to reproduce a feature of speech). Finally, in turn 6 diamont_PF reciprocates pimousse's reduplicated greeting.

In this second example, two Arabic speakers, a brother and sister from Qatar, greet each other in English, on *MSN Messenger*. Doddee uses reduplication to achieve the sought-after balance in communication:

(4.12)

```
mona says:  
Hiiiiiiiiiiiiii  
dodee says:  
Hiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii  
mona says:  
how u doing  
dodee says:  
ok
```

Rintel *et al.* (2001) refer to this reciprocation as ‘adornment matching’. They suggest two motives for its use: the establishment of intimacy; and the foundation of turn sequencing.

Thus (2001:21): 'Matching can be a powerful demonstration of alignment to the dyad ...'.

This adornment matching is not common in the *Webheads* text under investigation, however. In the following example, Sara, new to *Webheads* but adept in the conventions of IRC, greets Vance on *Yahoo* Messenger:

(4.13)

```
sara_fahad2000: hiiiiiiiiiii  
vance_stevens: hi there
```

Yet reciprocation in greeting does exist with *Webheads*. Notable is the case of 'bonjour'. It is the habit of one regular on *Tapped In*, PhilB, to use the greeting 'Bonjour' or 'bonjour y'all'. The greeting is often reciprocated, to the extent that it has become a community convention. The first instance of the 'bonjour' sequence occurs the first time PhilB (using the nickname PhilipAB) attended a *Webheads* session:

(4.14)

```
JohnSte says, "Hi, PhilipAB"  
PhilipAB says, "Bonjour, John. Welcome to Tapped In."
```

On his second visit, PhilB's greeting is reciprocated by SusanneN:

(4.15)

```
PhilB says, "Bonjour, y'all."  
SusanneN says, "Bonjour, m'sieur"
```

In subsequent visits the 'bonjour' greeting is sometimes reciprocated, and sometimes not:

(4.16)

```
PhilB exclaims, "Bonjour, y'all!"  
VanceS says, "certainly is"  
BJB says, "bonjour, Phil"  
JohnSte says, "Hi."  
PhilB asks, "What's shakin?"  
VanceS says, "bonjour phil. Nous sommes en train de regarder un  
web page"
```

(4.17)

```
PhilB exclaims, "Bonjour, Vance!"  
VanceS says, "bonjour"
```

The 'bonjour' greeting seems to encourage other participants to use foreign language greetings as well. Here, Peter (who lives in Tokyo) arrives at *Tapped In*:

(4.18)

```
VanceS says, "Hi Peter (tokyo)"
PhilB says, "Bonjour, Peter. Welcome to Tapped In."
Michael_C [guest] says, "Yep"
Peter [guest] says, "Phillip Benz bonjour"
VanceS says, "A nit is a louse (plural, lice)"
ying [guest] says, "I don't get it... picky."
Peter [guest] says, "and konichiwa to all"
```

Here, JohnSte (who lives in Puerto Rica) uses Spanish to greet PhilB:

(4.19)

```
PhilB exclaims, "Bonjour, y'all!"
MargaretD says, "In companies you need to dress the part if you
teach business English"
VanceS says, "bonjour a toi"
JohnSte says, "Hola, Phil."
```

On occasion, other participants pre-empt PhilB's greeting as soon as he arrives at *Tapped In*. Here, the automatic joining event (AJE) allows participants to know PhilB has arrived; BJB greets PhilB before he makes his own established greeting:

(4.20)

```
PhilB has arrived.
R2 follows PhilB to here.
BJB [HelpDesk] waves bonjour to Phil
PhilB says, "Bonjour, y'all."
```

(Rintel *et al.* [2001] provide a detailed analysis of the role of the AJE in SCMC discourse.)

Reciprocation in addressivity thus does not necessarily involve the representation of prosodic features of speech in writing. Reciprocation is general of human communication, whether computer-mediated or not, and in SCMC should not be seen as only a spoken or speech-into-writing trait. Participants will find ways of carrying out reciprocation with the linguistic means at their disposal.

4.3 Emotes: Commentary in the present tense

In this section, we examine ways in which the interplay of CMC technology and the conversational uses to which it is put allows for the emergence of discourse features and associated literacy practices which are specific to SCMC.

Emotes are a group of related features in SCMC discourse which are normally sent in the third person, and frequently in the present simple tense. They are an integral part of the instances of byplay discussed below and in section 4.4. The distinguishing characteristic of the emote is that it in some way represents an acting out in text of something which can only be really done in 'real life'. The term *emote* is from MOO jargon (Cherny, 1999); in IRC they are called *actions* (Werry, 1996); Hentschel (1998) terms them *metacomments*.

IRC actions are frequently abbreviated enactments of physical movements and gestures. The common ones in the extract below, from a stretch of text from an internet chatroom, are LOL, LMAO, ROFL, and ROFLMAO.

(4.21)

```

1      Guest_Webley : How about LOL? (YW=you're welcome, I suppose)
2      I†$_JAM¥ : of course it isn't bad here
3      I†$_JAM¥ : laugh out loud
4      trebor_1256 : lol mik...hang about here then
5      Mik : laughs out load
[... ] (5 turns)
11     I†$_JAM¥ : that is lmao
12     Mik : laugh me arse off
13     trebor_1256 : LMAO = laufing my a** off
14     I†$_JAM¥ : beat me to it
[... ] (5 turns)
20     trebor_1256 : ROFL = rolling on the floor laufing
21     Guest_Webley : LMAO!! I like it!
22     trebor_1256 : therefore...
23     Mik : roflmao
24     trebor_1256 : ROFLMAO = rolling on the floor laufing my ass off

```

We can note that according to the participants in this chat room, the tense, aspect, and person (first or third) used when these abbreviations are expanded varies:

abbreviation	expansion	tense/aspect
LOL	laugh out loud	present simple
LMAO	laughs out load	
	laugh me arse off	present simple
	laufing my a** off	present continuous
ROFL	rolling on the floor laufing	present continuous
ROFLMAO	rolling on the floor laufing my ass off	present continuous

Figure 4.4 Abbreviated emotes

These abbreviations are widespread in English Language IRC, even in rooms with ‘serious’ names, and in mobile phone text messaging (Thurlow, 2002). The above discussion took place in a chat room whose subject was computer technology, and where reduplication of letters and punctuation did not tend to feature. Though the room was supposed to be dedicated to serious topics, as with much IRC, uncapitalised and unpunctuated turns are the norm, the exception being the turns of the (then) novice IRC participant Guest_Webley.

This type of emote also appears in *Webheads* discourse, as can be seen in the following examples from a variety of sessions:

(4.22)

- a Brazil: How about the boycott Mad ?? LOL
- b Ying-Lan: ^I only remember stock... LOL
- c Brazil: Because generally on Sat I stay here watching the sun raise.. lol
- d Felix: My wife is a nice girl... I dont know how she can stand me.. ROFL

Although these emotes are supposed enactments of physical movements and gestures, a separation of the action and the typed turn is proposed: it is unlikely that Felix was actually rolling on the floor laughing as he typed the turn in 4.22d.

In the above examples from IRC and *Webheads* interaction in the MOOs *The Palace* and *Tapped In*, the emotes are simply typed and sent. SCMC programs also allow for emotes or actions to appear as having been sent in the third person, often in the present tense. In the following extract, robert 2323 in turn 5 submits a third person commentary rather than a first person turn:

(4.23)

- 1 robert2323_ : i'm in a good mood considering they let me out of jail 15 days early
- 2 robert2323_ : YESS
- 3 Guest_joey_jeremiah : **creme de la creme de la mediocre**
- 4 Conrad523 : good for you
- 5 robert2323_ is a free man

Turn 5 has been generated using a command called the *action* command, distinct from the one used to write and enter the first person turns 1-4. Incidentally, we have no way of

knowing whether robert2323_ is being truthful. This is a foreshadow of the discussion of identity play in section 4.5 below.

Werry describes an early version of the ‘action’ feature of IRC, suggesting: ‘This property of the genre makes Chat more than simply speech-like: it takes on properties of direct face-to-face interaction, thereby distinguishing it from other technologically-mediated forms of communication such as telephone conversations’ (1996:61). Werry is right, though he fails to stress that the action is not necessarily being carried out in real life at the same time. Emotes are a unique feature of SCMC discourse, arising from the technology and its circumstances of use, and serve to distinguish SCMC further from both speech and writing.

Cherny, in her in-depth study of a recreational MOO, divides emotes into five categories in terms of their role in the discourse (1999:202):

Name	Example	Tense
Conventional action	Tom waves	Present
Back Channel	Tom nods	Present
Byplay	Mike pastes Tom's lips	Present
Narration	Is packs for his trip	Present
Exposition	Tom hated that movie	Any

Figure 4.5 Cherny's classification of emotes

Using the same classification, we see here how emotes function in *Webheads* discourse as conventional actions, back channels, and narration emotes. In the following section, 4.4, we devote attention to byplay as it relates to roleplay and the development of the virtual community. Examples here are from the logs recorded in the MOO *Tapped In*.

Conventional action

Conventional actions are sent in *Tapped In* by posting the turn prefaced by a colon or a slash (: or /). In this example, the participant DavidW would have typed ‘:smiles’. When the turn is posted, he would see on his screen ‘you smile’.

(4.24)

DavidW smiles.

Back channel

Back channels are emotes in MOOs. Cherny (1999:185) notes that although they have turn status, they function in a similar way to back channels in face-to-face communication.

(4.25)

- a VanceS [Webhead] nods
- b VanceS exclaims, "You can't go on meeting like this!!"
BJB [HelpDesk] agrees groggily

Back channels such as these help maintain the sense of social co-presence of participants in the MOO.

Narration

Narrations in Cherny's typology refer to instances when participants in MOOs document their actual actions in real life. In the *Webheads* group, they are often used to explain absences of to apologise for missing a turn. In example 4.26, BJ used the 'think' command to explain that she is leaving her keyboard for a short while:

(4.26)

```
BJ . o O ( brb )  
JohnSte says, "ok"  
BJ says, "back"  
JohnSte says, "ok."
```

The shorthand 'brb' is for 'be right back'. To send her first turn to appear in a cartoon 'think' bubble, BJ typed the pre-programmed command 'think:brb'.

4.4 Byplay and *ad hoc* roleplay in *Webheads*

"In text-based virtual realities such as MUDs, words *are* deeds" (Turkle, 1995:15).

Byplay emotes are used in playful fashion to interact with other participants in the MOO *Tapped In*. In the following extract, SusanneN and RoslynT wish to learn how to use the 'nudge' feature (turns 1, 2 and 4). The response from BJB (turn 6) tells them what to do. In the meantime, Vance (turns 3 and 5) uses the nudge feature himself. In the subsequent turns, 7-12, there is a bout of nudging.

(4.27)

```
1  SusanneN wonders how you NUDGE someone?
2  RoslynT says, "sO DOES rOS."
3  VanceS [Webheaded] nudges Susanne
4  RoslynT asks, "Do you just type it?"
5  VanceS [Webheaded] nudges BJB [HelpDesk], JohnSte
   [Webhead], RoslynT SusanneN, DanB, and MargaretD.,
6  BJB [to RoslynT]: "type :nudges Vance"
7  JohnSte says, "I feel somebody nudging me."
8  SusanneN nudges roslyn
9  JohnSte [Webhead] nudges all
10 SusanneN nudges poor John too
11 DanB . o O ( I need to hide under the desk. )
12 JohnSte says, "Oh, my aching ribs."
```

As Cherny says (1999:208): 'The overall impression these actions give is of a cartoonish unreality ...'.

In *Tapped In*, byplay may also make use of the 'mood' command, appearing in square brackets after the participants' names. In the following extract, DavidW responds to ArthurM's question (turn 1) by changing his mood to [CIA] (turns 2, 4 and 5). He does this by typing the command 'looks CIA'. BJB's rebuke in turn 6 is a prototypical byplay: there is imaginary interaction in text, in the third person, with another participant.

(4.28)

```
1  ArthurM asks, "Have you a Libya connenction?"
2  DavidW looks CIA.
3  VanceS says, "I'll give it to you here ... no, I'm a Saudi /
   Oman hand, now UAE"
4  DavidW [CIA] listens to conversation surreptiously.
5  DavidW [CIA] grins.
6  BJB [HelpDesk] smacks David and tells him to behave himself!
```

When adopting the mood [CIA], DavidW takes on characteristics of a snooper or spy (turn 4). The use of such byplay in *Webheads* interaction brings us to an enquiry of its broader functions.

Danet *et al.* (1998), in a paper referred to in more detail in section 4.5.1 below, call SCMC 'an inherently playful medium'. The playful, or ludic, possibilities of SCMC discourse can act to strengthen the social ties of the virtual community. In the following extract from *Webheads*, we see an instance of 'Marijuana byplay':

(4.29)

```
1  Felix: only alchool is allowed
2  Vance: ffftttt (cough cough) ...
```

3 Michael C: LOLOL
 [...] (4 turns)
 8 Michael C: Stop bogarting Vance!
 [...] (2 turns)
 11 Felix: what is bogarting ??
 [...] (1 turn)
 13 Michael C: When someomne won't pass the joint.
 [...] (2 turns)
 16 Felix: I still dont understand Michael.
 17 Vance: cough cough
 18 Michael C: Joint = marijuana cigarette.
 19 Felix: Why are you coughing Vance?
 20 Felix: OHHHHHHHHHHHHHHHHHHHHHHHHHHHHHH

Such humorous instances in SCMC can, it is suggested, bind the virtual community. Baym (1995a) claims that far from being inhospitable to humour, humorous performance in CMC can be used to create group solidarity, group identity, and individual identity (1995a:2). She also quotes a number of participants in a newsgroup devoted to the discussion of soap operas, who largely agree that: '... there are few posts (or posters) more appealing than those which make them laugh' (1995a:4).

Byplay of this kind can become routine or conventionalised practices within a virtual community. An example is the 'coffee routine', whereby participants offer coffee to each other. The extracts below show how narration (that is, commentary on what is actually happening in real life, can merge into byplay.

Coffee narration

Recall that narration in Cherny's (1999) classification (figure 4.5) is commentary on a participant's 'real life' action, as in example 4.30:

(4.30)

DavidW says, "I'm off in search of coffee. I'll speak to you all later."

We have also seen that using the shorthand 'brb' (be right back), Webheads participants explain their absences in advance using narration:

(4.31)

a MichaelC: brb...gone to get coffee.....
 [...] (5 turns)
 MichaelC: back....

 b <John> BRB - Going for some coffee.
 [...] (10 turns)
 <John> I'm back.

In this example, Susanne uses the ‘mood’ command to signal that she is having a coffee break:

(4.32)

```
SusanneN looks coffee break..  
SusanneN [coffee break.] brb
```

Coffee routine: byplay

The coffee routine is an instance of byplay, as it involves other participants. The point where narration becomes byplay can be seen clearly in extract 4.32. In turn 1, Nicia tells other participants she is going to make coffee (narration). Maggi (turn 3) asks for a coffee herself (byplay), and is joined by Vance in the byplay (turn 7):

(4.32)

```
1 <Nicia> I will go to make a coffee....  
2 <Vance> OK, permission was requested for you to add me  
   (and Sergei also)  
3 <Maggi> get me one too Nicia!  
4 <Nicia> we have a good coffee here....  
5 <Michael> John - what's your Yahoo ID?  
6 <ying> I love to smell coffee not drink... the holiday is  
   over ... I need to go to office tomorrow,,, it means I  
   have to get up early tomorrow morning.  
7 <Vance> ok, I got Michael. Yeah, I can smell that coffee  
   here ...
```

Often the byplay with the coffee routine is casual and incidental, as in the following extracts in 4.33:

(4.33)

```
a SusanneN sounds interesting, Vance, can I bring some hot  
   coffee?  
   BJB nods to John  
   SusanneN sings, ~\ i again, John /~  
   VanceS says, "Make mine an double expresso please"  
  
b Ying [guest] says, "May I have some bread and cake with  
   coffee.."  
   SusanneN [helpdesk] hands some hot chocolate cake to  
   Ying, pass the plate, please
```

However, in the following examples, the byplay is with a programmable object.

Interaction with objects is possible in *Tapped In* when members of the MOO programme

use certain commands, in a similar way to the use of the ‘think’ command we saw above. In this case, when the command ‘/drink coffee’ is used, a sequence of turns are automatically generated. On the first occasion, the turn appears as:

[participant] pours a cup of steaming hot coffee from the pot!

on the second, as

[participant] takes a sip of hot coffee..

and on subsequent occasions, as

[participant] takes another sip of coffee. .

The turns in example 4.34 (a-d) were posted at various points in one *Webheads* session at *Tapped In*:

(4.34)

- a SusanneN pours a cup of steaming hot coffee from the pot!
 SusanneN takes a sip of hot coffee..
- b SusanneN [Tinkerbell] is a learning student from denmark
 SusanneN takes another sip of coffee. .
- c JohnSte [Lord Seven-Eyes] vacuumses the black soot.
 SusanneN takes another sip of coffee. .
- d SusanneN says, "/dips her wings in soot and fly all over
 thev room to sprinkle a layer of dusty black soot"
 SusanneN takes another sip of coffee. .

On this occasion the coffee routine is extended to become a virtual ‘surprise party’ where participants eat and drink in the virtual environment:

(4.35)

SusanneN asks, "I got Carlsberg special?"
DianneA gobbles up a first pancake spread with butter.
MargaretD says, "why not..."
SusanneN asks, "Chicken or veal?"
MargaretD asks, "with beer?"
SusanneN says, "you just /drink carlsberg"
SusanneN drinks a refreshing mouthful of cola.
SusanneN asks, "I see David is on his way?"
MargaretD drinks a big gulp of soda and belches loudly.
DonnaCB finds her way in.
DonnaCB's personal recorder follows DonnaCB to here.
ying [guest] asks, "Do you have a party?"
SusanneN exclaims, "Hi Donna, welcome to our party!"

In the final example of this section the *Webheads* group have organised a virtual Halloween party. We can see how two features of the MOO *Tapped In* are used for playful purpose: the ability to insert one's self-description or user profile into the text of the discourse as it scrolls up the screen; and the inventive use of the 'mood' command:

(4.36)

```

1  JohnSte [Lord Seven-Eyes] projects JohnSte [Lord Seven-
   Eyes].
   -----
   You see a 7-1/2 foot (2-1/3 meter) tall, brown, cylindrical
   shaped being with four long arm-like appendages located
   near, but somewhat below, the top of the cylinder. Each arm
   is 90 degrees for the arms on each side of it and ends in
   two hands. Each hand has seven long limble digits. At the
   top of the cylinder are seven flexible eye-stalks. The eyes
   move individually to allow the being to look at up to seven
   different things at the same time.
   http://www.geocities.com/jhsteelepr
2  DanB . o O ( Wonder if apple cider has been spiked. )
3  MargaretD . o O ( wonder what happens when he gets cross-
   eyed )
4  JohnSte says, "Hope so, Dan."
5  MichaelAC exclaims, "Oh...imaginary costumes!"
6  VanceS says, "I'll put on my costume"
7  BJB laughs at the thought of all the eyes crossing
8  VanceS looks FRANKENSTEIN!!!.
9  VanceS [FRANKENSTEIN!!!] BOO

```

In the extract above, JohnSte has altered the 'mood' command so

[Lord Seven-Eyes]

appears after his name as each turn is sent. He has also edited his user profile to include the text we see below turn 1. Upon using the 'project' command, which he does in turn 1, the text of the user profile is inserted into the log of the chat as it appears on all participants' screens. Vance also uses the 'mood' command to adopt his 'Frankenstein' personality (turns 6, 8 and 9).

At this point we begin to see how participants in SCMC discourse utilise the technological functions (mood, projection, programming objects etc.) to extend, alter and adjust aspects of their personality or identity. In the final section of this chapter, we investigate in more detail how various features of the discourse of SCMC allow for some specific, and occasionally disturbing, literacy practices.

4.5 Identity, intimacy and abuse in text-based SCMC discourse

In this section the discussion is of electronic literacy practices impinging on identity and interpersonal relationships online. Investigating text from synchronous CMC allows us to observe the discourse, linguistic, and even psychological, concomitants of interpersonal relationships as they originally developed within a virtual space and in real time. Though carried out in virtual environments, these relationships can embody, for users of SCMC, a tangible aspect of reality. Along with the development of virtual communities which coexist in parallel with those in the physical world (see discussion in Chapter 2), the interplay of SCMC and its participants provides the conditions for the development of novel aspects of individuals' identities in virtual spaces.

Turkle, in her work on the impact of CMC on people's psychological lives *Life on the Screen* (1995) shows that multiple and decentred senses of identity emerge in the participants of IRC, MUDs and MOOs. She quotes a 30 year old woman discussing her identities (*handles*) on IRC (1995:179):

It is a complete escape. ... On IRC, I'm very popular. I have three handles I use a lot. ... So one [handle] is serious about the war in Yugoslavia, [another is] a bit of a nut about *Melrose Place*, and [a third is] very active on sexual channels, always looking for a good time. ... Maybe I can only relax if I see life as one more IRC channel.

Turkle maintains with reference to 'post-modern times' that this cycling through different identities increasingly takes place in real life. She claims that in the virtual reality of the internet we 'self-fashion and self-create'. She asks whether we are 'watching the slow emergence of a new, more multiple style of thinking about the mind' (1995:180). While extended attention to the psychological consequences of this claim is beyond the scope of this thesis, it is nonetheless important to recognise that CMC does represent the opportunity for participants to negotiate new aspects of their identity and to develop relationships in virtual communities. Writers on CMC with backgrounds in linguistics and literacy studies also recognise that identity online is a matter of some significance. For instance, in their early paper on the register of interactive written discourse (IWD, i.e., SCMC), Ferrara *et al.* (1991:14) note that: 'In IWD in particular and CmC in general, acquaintance with interlocutors and facts of identity are nonessential matters with profound implications for the future.' Lam (2000), in her case study of electronic literacy, describes how one individual built relationships and developed aspects of his identity using websites, email and SCMC chat (see Chapter 7, section 7.2.2). Two broad areas concerning discourse and identity online are discussed here in section 4.5. Later in the

section, identity as it relates to both abusive and intimate verbal behaviour online is at issue. But first, in the following sub-section we see through an example from *Webheads* discourse how online identity can be altered for playful and pedagogic purposes.

4.5.1 Roleplay with Webheads

We have already seen how the use of the ‘mood’ command and the manipulation of the ‘profile’ feature in *Tapped In* can be employed to create possibilities for byplay of various kinds. SCMC, in this case the MOO *The Palace*, allows for the creation of situations where new roles can be adopted. We refer here to one particular occurrence of roleplay in the *Webheads* community (examples 4.37-4.40). In the first extract, the tutors Vance, Maggi and MichaelC, and the students Felix and Ying-Lan plan a roleplay session:

(4.37)

Vance: Another idea is to come to class prepared to take on roles and use the chat logs as a script, or the start of one.
Maggi: and the teacher is only a monitor
Vance: But we'd have to have a storyline and characters defined.
Michael C: That would be interesting Vance. Kind of develop the play as we go!
Felix: let's start one now?
Maggi: or helps to jumpstart things when they stall
Maggi: ok...
Michael C: I'm willing Felix.
Vance: Well, we could start on a plot now.

The purpose of this roleplay session would seem to be pedagogic: note Vance’s use of the word ‘class’ and Maggi’s description of a teacher who would act as a ‘monitor’ who would ‘jumpstart things when they [i.e. students] stall’. Learning with *Webheads* is discussed more fully in Chapters 7 and 8; only learning as it relates to roleplay is mentioned in this chapter. It should be noted that this extract derives from an early *Webheads* session; in contrast to later meetings, the *Webheads* community was referred to as an online ‘class’.

Drama and roleplay are used extensively in language teaching. Rationale for the use of drama and roleplay in language classrooms includes:

- allowing for an authenticity of expression
- filling the learner’s need for a sense of belonging

(Maley and Duff, 1978)

- unselfconsciously creating learners' own reality
- experimenting with learners' knowledge of the world
- developing learners' ability to interact with other people

(Porter Ladousse, 1987)

In our *Webheads* example of pedagogically-motivated roleplay, a little later, participants develop their roles further by providing background details:

(4.38)

```
Vance: She has a male patient obviously, one who has an unusual
condition.
Ying-Lan: ^The point is she can feel the crminial how to muder
the dead.
Felix: who is the doctor?
Maggi: and Felix as patient is madly in love with her.
Michael C: OK Single. Felix is her patient.
Michael C: What do you mean Ying?
Felix: what kind of doctor is she?
Maggi: is Felix the killer then?
Maggi: a therapist Felix
Ying-Lan: ^She is married and has a daughter. But Jack killed
her husband.
```

The participants have developed the idea of a drama surrounding a murder in a doctor's clinic. The roles are negotiated, and names are allocated. They are summarised by Felix:

(4.39)

```
Felix: Can I point out the roles?
Ying-Lan: sure
Michael C: Sure Felix (jack)
Felix: Ying you are Joyce the secretary
Felix: Maggi is Sam (the doctor)
Felix: Michael is Bill (the police detective)
Michael C: Thanks F!
Felix: Vance is Joseph (the other patient)
```

There follows a session, of which the example below is but a small part, where the participants take on the names and roles previously negotiated, defined and assigned. Using the 'change name' command of *The Palace* (by typing '/change name [new name]'), they have replaced their normal user names with those required for the roleplay:

(4.40)

```
Bill (FBI): OK. Dr Sam. I believe the deceased was a pateint of
yours?
Joyce: ^:-(
```

Sam: Sam takes Joseph off to the side to calm him down.
 Bill (FBI): lol
 Joyce: Sam, do you need help?
 Bill (FBI): Dr Sam - did you hear me?
 Sam: yes, he was detective
 Sam: (Joseph is quiet now that he has had a shot!)
 Sam: depression
 Joyce: ^have a seat, Take easy, Joseph
 Joseph: Where am I? What was in that shot?
 Bill (FBI): Did he ever talk about anyone wanting to kill him?
 Sam: joyce will take care of you.
 Jack: novocaine Joseph (shut up)
 Sam: not that he mentioned to me...
 Joyce: ^fine, you are a good boy.
 Joseph: Idd dhad why idds so hard do dalk?

Although *The Palace* is a graphical MOO, and the participants each have a moveable avatar (see Chapter 2), there is no reference to the graphical dimension of the interaction in the log of SCMC text. It can be assumed that though there may have been some visual interaction between avatars in the course of the roleplay, the prime site for communication was the text-based discourse which took place in the chat text box.

Danet *et al.* (1998; also in Danet, 2001) describe an improvised performance in IRC, described by Danet (2001:101) as: ‘... a kind of typed pantomime or game of textual charades.’ Rather than describing the interaction as simply taking place in a virtual environment, Danet proposes five different frames nested within one another within which the performance, an extended simulation of smoking marijuana, took place (*cf.* example 4.29 in section 4.4 above): 1) real life; 2) the IRC game; 3) party; 4) pretend play; 5) performance. The notion of ‘frames’ is taken from Goffman (1974). Applying the same concept of ‘nested frames’ to describe the *Webheads* murder mystery roleplay, we can also identify five levels of frame (figure 4.6 below).

Real Life, where the participants exist ‘by dint of being alive and functioning’ (Danet, 2001:102), is superseded by interaction in the MOO *The Palace* (frame 2) and more specifically in the *Webheads* group (frame 3). The extract in example 4.37 takes place in frame 3. In both frames 3 and 4, participants may adopt new roles or identities for their SCMC interaction. In the case of *Webheads* interaction, as noted in Chapter 2, online roles are taken to be equivalent to Real Life ones: in a community dedicated to discussion of learning there is little need to create elaborate online personas which are very different from those of Real Life. Nonetheless, nicknames or shortened versions of real names are used. In addition, in *The Palace*, a visual MOO, participants adopt visual characters – avatars. Frame 4, the Pretend Play frame, is evident in examples 4.38 and 4.39, when the

plot is being negotiated and new roles are assigned. And the performance itself, example 4.40, takes place in the Performance frame.

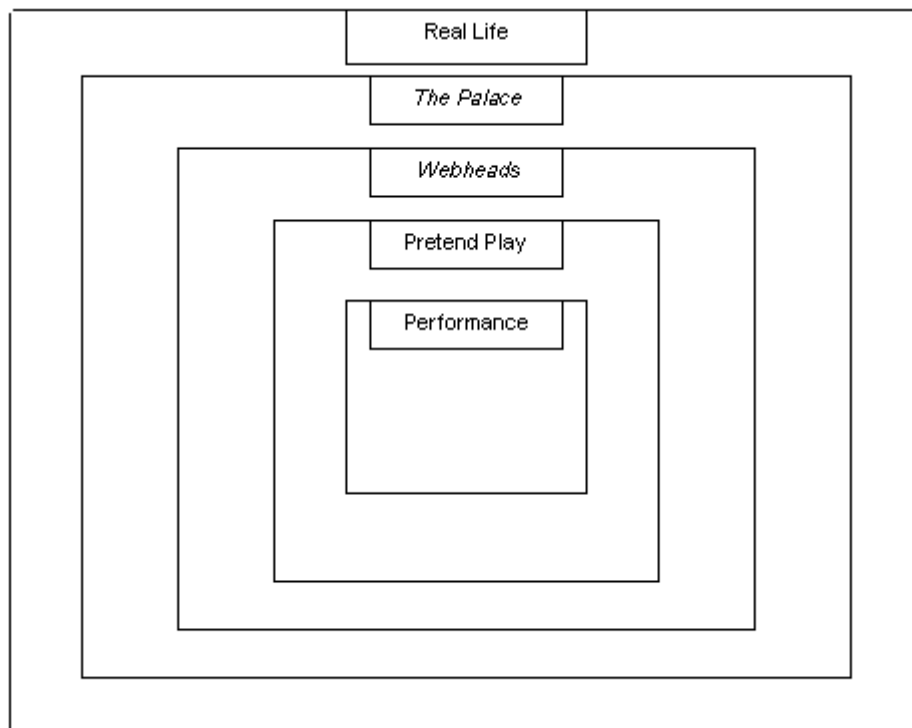


Figure 4.6: Nested frames of interaction in MOO discourse

It was suggested in Chapters 2 and 3 that a binary distinction between interaction in Real Life and in the virtual world is too simplistic to take into account the fluid, dynamic, polyfocal discourse engaged in by participants both on-screen and off. Likewise, the conception of SCMC discourse as taking place in various embedded frames may also imply a more stable progression than that which actually occurs online. Nonetheless, in the case of the *Webheads* roleplay above, participants maintained their new roles until the end of the session.

Porter Ladousse believes this of roleplay in English language classrooms (1987:5): ‘None of the risks of communication and behaviour in the real world are present. The activity is enjoyable and does not threaten the students’ personality.’ When the participants are known to each other online, as they are in the example from *Webheads* above, roleplay can perhaps seem as benign and playful as it does in Porter Ladousse’s classroom world. However, similar features of SCMC also allow for more malevolent verbal behaviour, as we see below.

4.5.2 Intimacy and abuse in SCMC

Participants in SCMC discourse often exhibit verbal behaviour which seems to violate certain pragmatic principles relating to conversation. The discourse displays features of language which one would expect in spoken discourse where the participants either have a very unequal power relationship or are extremely close: namely, very intimate or very abusive language. Noting such features raises questions both of individual online identity and of role relations in virtual environments.

Abusive behaviour in CMC is commonly known as ‘flaming’. In the following extract from IRC, taken from a chat room called *Philosophy and absurdity*, we witness a series of abusive statements, or flames, between participants with the nicknames Burbilzen3cc, AbnormalChick and Guest_null:

(4.41)

```
1      burbilzen3cc : you are just resentful little cheap heads
2      AbnormalChick : great argument
3      Guest_null : cheap heads?
4      AbnormalChick : is that all u can do?
5      burbilzen3cc : is that not enough?
6      AbnormalChick : u r miserable and unpleasant
7      burbilzen3cc yawn
8      AbnormalChick : enough for what?
9      Guest_null kicks burb in the dick
10     burbilzen3cc : you both are but swine
11     ▶ Guest_AmericanPie has joined the conversation.
12     AbnormalChick : then take your precious little ass out of here
13     burbilzen3cc : I am but a redwood to your itch weed
```

Burbilzen3cc seems to be provoking the other participants into reacting to his or her abuse. An immediate problem with analysis of data from IRC is that we do not know, nor have we any way of ascertaining, the relationships the various participants have either in Real Life or online. We might say that the participants are online acquaintances, and do not know each other in the physical world, though this would only be an assumption. Whatever the roles, however, the equivalent of the above exchange in spoken casual conversation between most interlocutors would seem very odd.

The tendency of spoken language to display similar features at opposite ends of power relationships was noted by Wolfson (1988) in her theory of the Bulge. She found that people who are intimate share speech behaviour with those whose status is unequal, and with strangers. This behaviour is different from that shown between nonintimates, colleagues, status-equal friends and acquaintances. The theory is called the Bulge because

of the way: ‘... the frequencies of certain types of speech behaviour plot out on a diagram with the two extremes showing very similar patterns as opposed to the middle section which displays a characteristic bulge’ (Wolfson, 1988:32). Wolfson continues: ‘... the two extremes of social distance – minimum and maximum – seem to call forth very similar behaviour, while relationships which are more toward the center [i.e. the Bulge] show marked differences.’

Here, Cook (2001:150) discusses the theory of the Bulge:

Where the relation is already established and secure, there may be less need for politeness strategies. This accounts for a similarity in behaviour in relationships of marked power differences on the one hand ... and of equality and intimacy on the other. ... Both generate bald statements and commands, physical proximity without apology, the broaching of intimate subject matter, interruption and abrupt topic switch.

Amongst acquaintances in SCMC interaction online, there is both very intimate and very abusive verbal behaviour. In MUDs, MOOs and on IRC, there is a range of virtual sex (Turtle, 1995, Chapter 8) and participants often show great intimacy. The example of abusive behaviour in IRC above (4.41) contradicts the theory of the Bulge if the interlocutors are regarded as online acquaintances. Such language as is seen there, according to Wolfson, either signals a marked power distance or equality and intimacy. However, if participants regard one another as complete strangers rather than online acquaintances, such behaviour would conform to the language which might be found at the tapered ends of the Bulge.

A further explanation for the high instances of both abusive and intimate verbal behaviour online might lie in the ‘reduced social cues’ hypothesis. We have already seen that the social cues of face-to-face spoken casual conversation have equivalents in SCMC, though in what might be regarded as diminished form (see section 4.2 above). Moran and Hawisher (1998:91) suggest that the ‘reduced social cues’ hypothesis, originally seen as an explanation for anti-social on-line behaviour (flaming), also explains the phenomenon of interlocutors becoming *more* social than in their equivalent face-to-face spoken casual conversation. The following extract of IRC discourse contains both abusive behaviour and levels of intimacy which would again seem to run counter to the theory of the Bulge but would confirm the reduced social cues hypothesis.

(4.42)

```
1      Guest_vixen : bye cat bye leyla
2      Guest_~Leyla~ : vixen
3      Guest_~Leyla~ : vixen
4      Catwoman™ : bye sinner
5      Guest_vixen : yes>
```

6 ▶ **Guest_ROMEO** has left the conversation.
 7 Guest_~Leyla~ : **say jon i love him**
 8 Guest_~Leyla~ : **and**
 9 Guest_~Leyla~ : **bye**
 10 Guest_~Leyla~ :
 11 Catwoman™ : **hmmmm**
 12 Guest_vixen : **u sure about that leyla**
 13 Guest_Outlaw™®© : **SHUT UP LEYLA**
 14 Guest_vixen : **have the shotgun ready**
 15 ▶ **SSJ2_Trunks14** has joined the conversation.
 16 Guest_Outlaw™®© : **YOU IDIOTIC WOMAN**
 17 unicornseeker : **lol Leyla**
 18 Guest_Outlaw™®© :
 19 Guest_~Leyla~ : **sorry taking it back.....**
 20 Guest_~Leyla~ : **what outlaw???**
 21 Catwoman™ : **lucky**
 22 Catwoman™ : **wow**
 23 Guest_Outlaw™®© : **DONT MIND HER SUN**
 24 Guest_~Leyla~ : **what did you call me?**

Vixen is closing the exchange with Leyla in a manner which seems to comply with the pragmatic politeness principle of ‘making the hearer feel good’ (Lakoff, 1973, in Cook, 2001:150), and which is unusually friendly and lengthy for an IRC closing. In turns 13 and 16 there is a sudden interruption from Outlaw which elicits the responses from Leyla (turns 20 and 24) which can be interpreted as outrage. The reduced social cues hypothesis suggests that Outlaw only feels able to send her or his turns (13 and 16) because (s)he cannot be seen or heard by other participants.

Instances both of great intimacy and of abuse in SCMC compare with those in telephone and email discourse, and may be accounted for in similar ways. The discourse of SCMC may contain highly personal content precisely because the identity of the participants in the physical world is unknown (though they might be online acquaintances), so the interaction may be regarded as being between anonymous strangers. In this respect, it conforms to the theory of the Bulge. Also interlocutors simply cannot see each other (the reduced social cues hypothesis). As Baron says of the telephone (2000:233): ‘The lack of visual cues ... markedly increases the degree to which speakers are willing to make personal disclosures that they would hesitate to reveal face-to-face.’ We can consider SCMC as analogous in this respect; this may also help to explain why IRC is more popular with recreational participants than the less anonymous but only slightly less technologically feasible internet video conferencing. Regarding email, Baron also notes (2000:235): ‘Since we construct (and send) email in social isolation, and since we see the medium as ephemeral, we don’t feel particularly constrained by the social conventions

that govern face-to-face exchange or written communication.’ Though SCMC text can be as permanent as any other written text if downloaded and printed, it exhibits qualities of impermanence and ephemerality in the same way as email.

On occasion the abusive verbal behaviour in SCMC takes an extreme form of byplay, that is, interaction with other participants in the virtual world *as if* the interaction is taking place in physical reality (see section 4.4 above). Such byplay can be regarded as virtual assault. In a much-cited article for *The Village Voice*, Julian Dibbell (1993, reprinted in Dibbell, 1998) describes an instance of rape in the virtual environment of a MOO called LambdaMOO. Virtual rape can occur when one participant: ‘... finds a way to control the actions of another player’s character and can thus “force” that character to have sex’ (Turtle, 1995:251). This was the case in the incident described by Dibbell. A virtual assault can also take place when the perpetrator says it does. Cherny gives the example of an instance when a woman in the MOO at the centre of her study is distressed at being ‘hugged’ by a guest she does not know (Cherny, 1999:221):

- 1 The guest hugs Karen.
- 2 Karen is NOT hugged by the guest.

Despite her attempt in line 2 to retract the hug, another character later referred to “the guest who hugged her,” suggesting that he perceived it as nondeniable, or at least, nondeniable by her. In some sense, the action occurred as soon as the message turned up on people’s screens.

In the early days of *Webheads* interaction at *The Palace*, the following incident occurred, reminiscent of, though not as extreme as, that in Dibbell’s article. Recall that *The Palace* is a graphical MOO, and that as well as the ability to engage in text-based SCMC, participants have moveable avatars. Vance and Ying-Lan were interrupted by a character calling himself (herself?) ‘short dick’:

(4.43)

- 1 Vance: You must have learned something from your mistakes, something that will benefit you in the future.
- 2 Ying-Lan: ^Thanks Vance.
- 3 * short dick * can i suck your dick
- 4 Vance: Would you like to check out that other room?
- 5 Ying-Lan: ^good idea.
- 6 Vance: let's go
- 7 Ying-Lan: where?
- 8 Vance: cool, huh?
- 9 Ying-Lan: Where is egg?
- 10 Ying-Lan: ^who is shor-dick?
- 11 Ying-Lan: nice
- 12 Ying-Lan: ^It is a dormitory.
- 13 Vance: Well, he's managed to join us despite the lock, so we'll have to ignore him.
- 14 Vance: Or, we could just chat on ICQ
- 15 Ying-Lan: Vance, do you know short dick?

16 Vance: Not at all
 17 Ying-Lan: Where is egg?
 18 Vance: Let's go to ICQ
 19 short dick: in my dick
 20 Vance: I don't know egg either
 21 Ying-Lan: fine
 22 short dick:)Kiss
 23 short dick:)Teehee
 24 short dick:)Yes
 25 short dick: vance you are a pig
 26 short dick:)Kiss

Ying-Lan and Vance were carrying out a discussion in a supposedly private room in *The Palace*, when they were joined by the participant with the nickname 'short dick'. His first turn to Vance (turn 3) was sent as a 'whisper' (see Chapter 2), that is, a private comment unseen by other participants (identifiable in the log as it is prefaced by an asterisk). This prompts Vance and Ying Lan to find another meeting place. Before they could leave, short dick continues his abusive verbal behaviour (turns 19-26).

In a discussion later (example 4.44), Ying-Lan and Vance describe the occasion to MichaelC and Jerry. It transpires that short dick not only carried out verbal abuse, but he also positioned his avatar over Ying-Lan's, as if to mimic an attack:

(4.44)

1 Vance: Ying Lan and I met a strange character here once.
 2 Ying-Lan: yes
 3 Vance: The cyber equivalent of a flasher.
 4 Vance: We were at the campus gate and he followed us
 here.
 5 Michael C: What did he flash?
 6 Vance: His avatar
 7 Michael C: !!!
 8 Jerry: My students read "Rape in cyberspace" and we
 discussed it in class at schMOOze.
 9 Michael C: Is that an article?
 10 Vance: It's an interesting concept. This guy used foul
 language and put his avatar over Ying-Lan's
 11 Jerry: Yes, I'll send you the URL. Its just as
 unpleasant to be assaulted virtually as in real life.
 12 Vance: So we retreated to ICQ
 13 Ying-Lan: ^I forgot him.
 14 Vance: You can just ignore them.

In Dibbell's article on virtual rape, much discussion is given over to the question of how far the actions in the MOO should be treated as being as grave as a case of rape in Real Life. Vance and Ying-Lan's comments demonstrate that for some participants, these are just words on the screen and are not analogous to their equivalent behaviour in the physical world.

Finally in this section, and as a short prelude to discussion of coherence and cohesion in SCMC in Part Three, we draw on work by Herring (1999) who proposes some technologically-related reasons for the attraction of this type of discourse. Herring comments on the ease with which participants in synchronous CMC can engage in parallel interactions within a CMC discussion. An extension of this observation is the opportunity CMC provides for participants to develop multiple selves in virtual space, and to engage in the type of verbal behaviour seen in examples in this sub-section. The term *hyperpersonal* interaction refers to the view that CMC for some is more desirable than face-to-face interaction. The features of the discourse determined by the technology are, in Herring's opinion, responsible (1999:17): 'Reduced feedback and loosened adjacency enable a qualitatively different kind of interaction from that possible in spoken conversation, and this contributes to CMC's 'hyperpersonal' appeal.'

Herring further attributes both the playful and hyperpersonal possibilities of CMC to the *conversational persistence* of the medium. Sacks *et al.* note (1974:697) that: '... the natural home of speech is one in which speech is not always present.' This can be taken to mean that naturally-occurring spoken casual speech is characterised by periods of silence (pauses and lulls in the conversation). This is not quite the case with SCMC. At the current stage in its technological development, most text-based SCMC (the text of IRC and most MOOs) is presented in linear fashion, where the text scrolls up the screen as new turns are posted. Although there is no sound, there is a constant visible record of what has recently been uttered. Thus even though text-based synchronous CMC approaches spoken conversation in its immediacy, it is nonetheless possible for participants to scroll back up the screen to see a record of previously posted turns, and so keep track of the multiple threads of the discourse. Herring suggests that this persistence aids a participant's cognitive processing (1999:18): '... CMC persists as text on a screen and is subject to conscious reflection in ways that spoken language is not, thereby facilitating a heightened metalinguistic awareness.'

Technologically-determined features which increase the hyperpersonal appeal of SCMC may also help to explain why other types of SCMC interface are not as successful as the standard, linear, scrolling version. Advances in CMC system design have the potential to remove the 'conversational persistence' of SCMC. Donath, Karahalios and Viegas (1999) report their development of a non-linear, text-based synchronous CMC interface called *Chat Circles*, where each turn appears in a circle on the screen and gradually fades, to be replaced by more recent turns. Their aim, it seems, is to impose a speech-like texture

onto the chat discourse; as they say (1999:3): 'This approach mimics real life conversations where at any given time the focus is on the words said by the person who spoke last.' Yet because there is no record of what has been posted, this system is less interactionally coherent than standard, linear, text-based synchronous CMC. Therefore it may not be as attractive to participants.

Summary

In this section we have discussed three related views which act as a starting point for further investigation of the issue of intimate and abusive verbal behaviour in SCMC discourse. We are obliged to consider them as a manifesto for future action, because further consideration of this particular issue is not possible within the bounds of this thesis. The three positions can be summarised as follows:

- The discourse of SCMC may contain highly personal content precisely because the identity of the participants in the physical world is unknown, so the interaction may be regarded as being between anonymous strangers. Complete strangers are one of the three groups which in Wolfson's (1988) research into the Bulge use such language. If people who engage in either very intimate or abusive behaviour in SCMC are regarded as acquaintances, then their verbal behaviour runs counter to the theory of the Bulge.
- Interlocutors simply cannot see or hear each other (the reduced social cues hypothesis). Unbound by the constraints of the paralanguage and prosodics of face-to-face communication, participants no longer feel compelled to abide by the norms of social interaction.
- CMC for some is more desirable than face-to-face interaction because of some technologically-determined features of the discourse which contribute to SCMC's 'hyperpersonal' appeal' (Herring, 1999). These are reduced feedback (including the lack of visual cues), reduced coordination of turn transfer, and 'conversational persistence' (the words stay on the screen).

4.6 Conclusion

In this chapter on electronic literacy practices and the discourse of SCMC we have considered both the participants' use of surface textual characteristics of the discourse, and the way aspects of individual identity are explored online. Literacy practices associated with the representation of face-to-face conversation in text-based SCMC were the use of the paralinguistic devices called emoticons, the representation of prosodics of speech in text, and the use of reduplication for reciprocation in greeting. Discussion then moved to the noteworthy ways in which participants interact with one another in the online environment. Discussion of emotes of various kinds turned to the use of byplay, glossed as verbal interaction in the text-based virtual environment with interlocutors and objects as if they are physically present. We have seen how the possibilities of byplay and other discourse features encourage the practice of roleplay and exploration of areas of identity.

We have suggested at points in this chapter that the discourse of SCMC may encourage a post-structuralist attitude whereby the world is seen as being created by language. In early MOOs, ASCII text provided the architecture for the virtual environment of a MOO; in that sense the world *is* created by language in a Multi-User Domain. Witness the opening remarks, part of the automatic joining event (AJE) in a log of text from the virtual university *SchMOOze* (from Carraro, 2000:121):

(4.45)

```
You easily pull open one of the heavy appearing oak doors, and
enter the Conference Center
Conference Center Lobby
-----
```

```
What a lobby! This richly decorated room is designed as a
gathering place for pre and post presentation chatter. The dark
oak panels reflect a warmth rivaled only by the heavy gold
brocade and antimacassar covered couches. Light is provided by
four large sky lights and three ornate chandeliers. There is a
coat check room to the north and a small refreshment stand to
the south. To the east are two sets of oak doors, one with a
sign that reads "The Quartz Room" and one reading "NETEACH
Nook".
```

A facet of an individual's electronic literacy, then, is the way in which participants in this new form of discourse position themselves and their identities in 'the cross-cultural milieu of Internet communication' (Lam, 2000:464) through interaction in virtual environments. Investigation of an individual's interaction in the discourse of a virtual

community can provide insights into the way that an individual's *textual identity* (to borrow another phrase from Lam) extends or differs from their identity in other discourse situations.

In the following chapters (5 and 6) which comprise Part Three of this thesis, the view is taken that interaction in a text-based virtual environment is based on a shared understanding of SCMC discourse, which in turn can be expressed as various types of knowledge.

Part Three: Coherence and cohesion online

In Part Two of this thesis a number of discourse features were discussed with reference to literacy and literacy practices within a particular virtual community. It was noted that the discourse of SCMC lacks many of the cohesive properties of spoken conversation, most obviously those dependent on prosodic and paralinguistic cues. Nonetheless we assume that the discourse is coherent – that is to say, unified and meaningful – for its participants. This is a reasonable assumption: if participants fail to find either unity or meaning in their interaction it is unlikely that they will persevere in the discourse. In Chapter 3 we discussed electronic communicative competence in terms of knowledge and ability for use in four areas: linguistic, discourse, technological and sociocultural. In Part Three we extend the exploration of electronic communicative competence in relation to coherence in discourse. Coherence depends in large part on the type and extent of knowledge which participants bring to the discourse. The four parameters of electronic communicative competence noted above may be viewed as elements of background knowledge which are necessary to render uncohesive text coherent for its participants.

As with other parts of the thesis, the balance of the chapters in Part Three is such that the weight of foundational discussion is shouldered by the first (Chapter 5) and the data-led extension by the second (Chapter 6). This is not to say that no reference is made to data in Chapter 5. On the contrary, the various perceptions of coherence mentioned are exemplified with wide reference to the text of SCMC. This is necessary when taking established (not to say, on occasion, historical) approaches to the study of coherence in discourse and applying them to the study of a novel type of discourse: that of SCMC. In Chapter 6 the focus is on the particular way in which coherence is reflected in the discourse text. Topical coherence is the starting point here, developed in the second half of the chapter as the topic-based notion of the conversational floor. This organising principle of discourse, deriving from ethnographic work on spoken multi-party discourse, is examined with reference to the SCMC discourse text from the *Webheads* group discussions.

Chapter 5. Coherence in SCMC discourse

5.1 Introduction

In Chapter 4, participants' verbal behaviour in SCMC discourse was viewed in terms of electronic literacy practices within a virtual community. An assumption made thus far is that the discourse is both unified and meaningful for its participants. In this chapter we bring the matter into the open as we turn to a theme of central importance to the analysis of synchronous text-based CMC (SCMC) discourse: coherence. This introduction includes a broad definition of coherence in discourse. It is proposed that coherence is not a property of text, but is ascribed to text by participants who bring to the discourse various kinds of knowledge. In the ensuing sections we investigate aspects of this knowledge, broadening outwards from the closest textual manifestations of coherence to those which require a wider understanding.

Thus in section 5.2 the distinction is made between coherence and its surface lexico-grammatical manifestation, cohesion. Section 5.3 brings propositional coherence to the fore, with sub-sections on proposition and macroproposition, and some discussion of elemental sentences. We then discuss in section 5.4 an aspect of coherence central to the conversation analysis tradition: sequentiality. For a number of reasons, the discourse of SCMC is only loosely cohesive, and it can be said that models of sequentiality based on face to face spoken discourse are not directly applicable to SCMC. And in section 5.5 we attend to areas which draw on more global knowledge, with a discussion of how background knowledge contributes to enabling participants to make the discourse coherent. Discussion of background, or *schematic*, knowledge, both of the discourse type (SCMC) and of broader contextual features of the discourse, are included in this section. These inter-related constructs, it is suggested, assume vital significance in a conversational medium which lacks many of the coherence-building devices of spoken discourse.

Each aspect of coherence noted in this chapter requires an appeal to different types of participant knowledge (Cook, 1995). Cohesion depends on a frequently implicit knowledge of various types of textual relation (Halliday and Hasan, 1976). Propositional coherence also depends on an implicit knowledge; this time a shared knowledge of semantic content that can be represented by linked propositions or statements (van Dijk and Kintsch, 1983). Sequential coherence requires the knowledge that inter-turn

interactional cohesion in SCMC is looser than that in spoken conversation (Herring, 1999). And coherence also requires appeal to schematic knowledge, either of the discourse content (content knowledge), of how interaction takes place in the specific SCMC environment (formal knowledge) (Widdowson, 1983, 1990; Carrell, 1983, 1987), or of a more general knowledge of the world around us (world knowledge) (Cook, 1994).

The chapter as a whole can be regarded as preliminary to Chapter 6. There, our concern is with a view of coherence within the Webheads SCMC environment which focuses on topic and conversational floor, and which requires an appeal to the factors of coherence outlined in this chapter.

Coherence

There is no doubt about the central place of a consideration of coherence in the study of discourse. We turn to Cook's (1989:4) definition of coherence as '... the property of being unified and meaningful.' A little later (*ibid.*:14) he defines the field: '... [discourse analysis] is the search for the answer to the problem of what gives stretches of language unity and meaning.' This is to say, discourse analysis is the search for coherence.

Amongst discourse and conversation analysts there is broad agreement on what constitutes coherence. On the whole there is also agreement on a distinction between coherence and cohesion. The devil is, as ever, in the detail. The search for coherence, in whatever mode or medium, and whether by the participants or by analysts, is an interpretive process. It is said that coherence is 'in the eye of the beholder' (Bublitz and Lenk, 1999). We can, and certainly do, appeal to linguistic form (lexis and syntax) to aid us in the process of ascertaining what gives language in use coherence: the surface links of discourse text – cohesion and propositional coherence – are an important aspect of coherence which we consider in the following sections. However, it is participants who ultimately accord meaning and unity to the text in the discourse process.

Before we move on to discuss cohesion in SCMC discourse, we shall consider two examples from the *Webheads* text which illustrate that there are different ways of achieving coherence. The first is a pair of turns from an early *Webheads* conversation at *The Palace*:

(5.1)

Ying-Lan: ^Thanks for your instructions.

Vance: My pleasure. I feel we used the time well.

The second is an exchange between two participants at *Tapped In*:

(5.2)

BJB asks, "welcome back, Roslyn...better connection now?"
RoslynT says, "o"

Each stretch of discourse was entirely coherent for its participants, as it is now for the analyst. However, coherence was achieved in each case in different ways. The first extract is at face value coherent and the second is not. Yet by appealing to different aspects of coherence, we see that ultimately both are equally coherent (meaningful; unified) for their participants. In the first extract, coherence lies most obviously in sequencing: the adjacency pair and the notion of conditional relevance are what participants and the analyst alike appeal to. Furthermore, there are referential links (your, my, we) which provide some cohesive 'glue' for the text. In the second extract, the net is cast wider; coherence is ascribed here again with reference to an assumption of relevance but also to a background knowledge of SCMC discourse within the virtual environment which is the discourse setting. To reiterate where discussion of aspects of coherence are found in this chapter: cohesion *per se* is examined in section 5.2 of this chapter; propositions are discussed with reference to topic in section 5.3. Sequential coherence and issues surrounding conditional relevance are addressed in section 5.4; background knowledge in section 5.5.

It goes without saying that lexical and syntactic relations within sentences or clauses are of great importance in achieving understanding. In this chapter we are more concerned with aspects of coherence which impinge on the conversational level; many, though not all, of these aspects exist beyond the individual turn and, as already noted, beyond the text.

5.2 Cohesion in SCMC

‘“Coherence” has often been confused or conflated with “cohesion”; but the distinction between connectivity on the surface and connectivity of underlying content is indispensable’ (de Beaugrande and Dressler, 1981:3). It is this surface connectivity, cohesion, which we address here. Cohesion, as de Beaugrande and Dressler continue: ‘... concerns the ways in which the components of the SURFACE TEXT, i.e. the actual words we hear or see, are *mutually connected within a sequence*’. The aim of this section is not

to provide an exhaustive account of cohesion in SCMC, and for this reason we do not dwell on the area. Rather, we investigate cohesion through a brief illustrative summary and discussion of its role in the wider question of how coherence is ascribed.

A strong view of cohesion would involve accepting that it contributes to the coherence of the discourse by being the ‘actual forms of linguistic linkage’ (Quirk, Greenbaum, Leech and Svartvik, 1985:1425). That is to say, cohesion is the linguistic manifestation of coherence. However, cohesion is primarily a feature of the text, and as such is more a reflection of coherence. This is not to say it is not important, and that cohesion does not play a coherence-building role as the text unfolds. This is particularly the case with SCMC discourse, where the textual record of the real-time conversation is immediately available for participants as well as the analyst. This point is developed in section 5.4.

At the outset it should be stated that although it is of course recognised that grammatical structure within the sentence has great cohesive power (Halliday and Hasan, 1976:7-8), the term *cohesion* is used here in Halliday and Hasan’s sense of non-structural text-forming relations. In fact Halliday and Hasan’s *Cohesion in English* (1976) is the best-known source of reference for a view of cohesion in discourse. Later in this section we question the extent to which cohesion can be considered simply as the linguistic realisation of coherence. Here, however, we outline what can be understood by cohesion as it relates to SCMC discourse. Halliday and Hasan describe in some detail five aspects of cohesion: reference, substitution, ellipsis, conjunction and lexical relation. In the discourse of SCMC it is quite easy to find illustrative attested instances of all of these. This is done below. We conclude the section with a consideration of some features of cohesion which are particularly characteristic of SCMC.

The examples in this section on cohesion are mostly taken from one single log of SCMC discourse text: S051, recorded at the MOO *The Palace* on 19 December 1999. Thus when the term *SCMC* discourse is used, it can be taken to mean ‘SCMC discourse within a particular environment, and as practised by members of a particular virtual community.’ This is not to say that the comments noted here do not apply to SCMC discourse in other contexts: it is suggested that they do, though further examination of discourse texts from other virtual communities might be required in some cases. For ease of reference the log of S051, 161 turns in length, is reproduced in its entirety as Appendix 3. Turns in S051 have been numbered in this section. There are three participants: Maggi and MichaelC (tutors) and Ying-Lan (student).

5.2.1 Reference

Items which have the property of reference are described by Halliday and Hasan (1976:31) as making reference to something else for their interpretation, rather than being interpreted semantically in their own right.

In this example, reference belongs to what Halliday and Hasan slightly misleadingly call the ‘person’ system; this comprises personal pronouns, possessive determiners (adjectives) and possessive pronouns. Turn 46 in the example below has been removed as it is not immediately relevant:

(5.3)

45 Ying-Lan: Maggi, What do you do in the snow day?
[...]
47 Maggi: shovel it

Here, *it* in turn 47 refers to *snow* in turn 45 ‘... by specifying its role or function in the situation’ (Halliday and Hasan, 1976:44.). In this case the situation is the Webheads SCMC conversational situation. The reference is anaphoric; that is *it* (the reference item) refers to preceding text.

Reference is described by Halliday and Hasan as a semantic relation: ‘... one which holds between meanings rather than between linguistic forms. [It is] a direction for interpreting an element in terms of its environment’ (*ibid.*). The referent is thus considered as a signal for meaning, pointing to the meaning which in this case (*snow*) is already available.

5.2.2 Ellipsis

Ellipsis in Halliday and Hasan’s terms refers to: ‘... sentences, clauses, etc. whose structure is such as to presuppose some preceding item, which then serves as the source of the missing information’ (*ibid.*:143). We note the distinction which Halliday and Hasan make between ellipsis as a grammatical relation (1976:144-5) and reference as a semantic one. Ellipsis, hold Halliday and Hasan (*ibid.*:226), ‘... signals in effect ‘supply the appropriate word or words already available’; it is a grammatical relation, one which holds between the words and structures themselves rather than relating them through their meanings.’

Examples of ellipsis are found in turns 87 and 88 below:

(5.4)

85 MichaelC: You saw Felix? Where?
[...]
87 Maggi: Where else silly...online...
88 MichaelC: Yeh yeh - but at the Palace or just ICQ or
email?

In turn 87, and with reference to turn 85, we could add the missing text thus: ‘Where else silly. I saw Felix online.’ Likewise, turn 88 could be rephrased: ‘Yeh yeh – but did you see Felix at the Palace or just ICQ or email?’ A clumsier rephrasing highlights the all-pervading use of ellipsis in discourse: ‘Yeh yeh – but did you see Felix at the Palace or did you see Felix just on ICQ or on email?’ Other, yet more awkward rephrasing is possible. The underlined words and phrases are the presupposed items which are explicit elsewhere in the text or are part of the shared background knowledge or schemata of the participants (see section 5.5).

5.2.3 Substitution

Substitution is the replacement of an item with another, usually *one*, *do* or *so*. Ellipsis can be thought of as the omission of an item or as its substitution by zero (Halliday and Hasan, 1976:88). Thus ellipsis is a form of substitution. Like ellipsis, substitution is considered by Halliday and Hasan as a lexicogrammatical rather than a semantic feature at the linguistic level. This is to say, ‘... the substituted item has the same structural function as that which it substitutes’ (*ibid.*).

In turn 129 of the SCMC log under discussion we see the following:

(5.5)

MichaelC: Well I must be the only one here not tired. (And yes
Maggie you're MAD.)

MichaelC has substituted the word ‘one’ for the word ‘person’ or a phrase containing the concept of ‘person among us’. The source of this presupposition is in the text of the discourse. Yet such is the nature of SCMC that we have to work quite hard to find that source, that is, to ascertain which previous postings turn 129 is actually cohesive with.

In the case of turn 129, we can take two stretches of the preceding text (5.6 and 5.7), with some intervening turns removed:

(5.6)

94 MichaelC: Ying - you're avatar looks very tired!
[...]
99 Ying-Lan: Yes, I am tired.
[...]
104 Ying-Lan: I might be in my bed, if I had not be here.
[...]
129 MichaelC: Well I must be the only one here not tired.
(And yes Maggie you're MAD.)

(5.7)

117 Maggi: I have to think about whether I have the
energy...
118 MichaelC: Tired from moving?
[...]
129 MichaelC: Well I must be the only one here not tired.
(And yes Maggie you're MAD.)

MichaelC's comment, including the substituted item *one*, follows two separate threads of conversation where he discusses being tired. The conversation is with Ying-Lan (5.6) and also with Maggi (5.7). The item *one* can be seen in the case of 'the only one here' as referring to 'person among Ying-Lan, Maggi and myself'. A full discussion of threads of conversation can be found later, in Chapter 6.

Incidentally, the second half of MichaelC's turn 129, in parenthesis, depends on two other types of knowledge for its coherence. Firstly, there is a lexical relation between the synonyms *crazy* (turn 127) and *mad* (turn 129):

(5.8)

127 Maggi: I was always crazy, right?!
[...]
129 MichaelC: Well I must be the only one here not tired.
(And yes Maggie you're MAD.)

Secondly, and dependent upon background knowledge (see section 5.5 below), we know from other *Webheads* SCMC logs that M-A-D are Maggi's initials, and she uses the nickname MAD in other SCMC environments.

5.2.4 Conjunction

Conjunction differs from reference and substitution (including ellipsis). Reference is characterised as a signal by Halliday and Hasan to supply a meaning which is already available, or will become available soon, either from outside the text (exophoric

reference) or from elsewhere within the text (endophoric reference). Substitution is a textual relation, say Halliday and Hasan, holding: ‘... between the words and structures themselves rather than relating them through their meanings’ (*ibid.*:226). The conjunctive device on the other hand marks a semantic relation between what comes before and what follows. In the case of the turn below (5.9), the word *so* is a coordinating conjunction:

(5.9)

Maggi: ...friend of hers is in Australia so we would have the use of a flat in the center

The conjunction links the clauses (*friend of hers is in Australia* / *we would have the use of a flat in the center*) by specifying the relation between them.

5.2.5 Lexical cohesion

As the name implies, lexical cohesion refers to the cohesive effect produced by particular vocabulary. A simple type of lexical cohesion is repetition. The cohesive relation between a lexical item and a preceding one is often very obvious, as in the following example. In turn 98 we see:

(5.10)

Maggi: I was invited to Zurich, but I think I will stay home.

This is followed seven turns later by:

(5.11)

MichaelC: What's happening in Zurich Maggie?

The cohesion is evident in the repetition of the item *Zurich*.

However, even with repetition in SCMC there are difficulties associated with the characteristics of loose sequential coherence alluded to previously and examined in detail later, in section 5.4 of this chapter. It is often not clear what the relevant preceding word or phrase actually is. In turn 46 below, for example, we see the word *snow* repeated. Because of a feature of sequential coherence in SCMC, disrupted turn adjacency, whether the repetition is from turn 42 or turn 45 is unclear.

(5.12)

42 Maggi: We had snow all weekend!!
43 Maggi: LUCKY DUCK
44 Maggi: Lucky
45 Ying-Lan: Maggi, What do you do in the snow day?
46 MichaelC: Wow! Snow time. We are having beautiful mild
days - 20/25 degrees.

Other types of lexical cohesion are related to other, broader aspects of coherence. They require reference to aspects of participant knowledge which are encyclopaedic or schematic rather than denotational (see section 5.5). Here we look in detail at turns 42 to 49, omitting the unrelated turns 43 and 44:

(5.13)

42 Maggi: We had snow all weekend!!
[...]
45 Ying-Lan: Maggi, What do you do in the snow day?
46 MichaelC: Wow! Snow time. We are having beautiful mild
days - 20/25 degrees.
47 Maggi: shovel it
48 Maggi: :-)
49 Ying-Lan: It is very cold and wet in Taiwan now.

Lexical cohesion here is antonymic in that Maggi's *snow* is followed later by two contrasting expressions: *beautiful mild* (turn 46) and *cold and wet* (turn 49). There is a common reference to the unstated superordinate *weather*. Coherence is also ascribed with appeal to schematic knowledge, knowledge that snow is related to weather, and that weather can be beautiful and mild, and can also be cold and wet. In this respect, lexical cohesion is a weak point in Halliday and Hasan's classification as it strays into other aspects of coherence, specifically encyclopaedic knowledge, rather than being, strictly speaking, a textual reflection of coherence.

5.2.6 Cohesive devices characteristic of SCMC

We end this section on cohesion by noting two areas where the nature of the cohesive devices is specific to, or highly characteristic of, SCMC discourse: the use of suspension dots, and certain features of participant naming.

Suspension dots

The cohesive device of three dots in text (...) is termed by Quirk *et al.* (1985:1636) *suspension dots*. There are a number of general features of suspension dots in SCMC discourse.

As we have already seen, they can be used as ellipsis dots; that is, they indicate the omission of unnecessary text. The first time they are used by Maggi here is for ellipsis:

(5.14)

Maggi: Where else silly...online...

They can also represent what would be a pause in spoken discourse:

(5.15)

Maggi: I'll be here too...so this is not the last time

Thirdly, they can indicate a 'trailing away' at the end of a turn or a sentence:

(5.16)

a Ying-Lan: Vance is on his Vacation... Does he go back to
USA with his family?

b Maggi: like I feel...

And finally they have a conjunction role. At the end of a turn they might appear as a 'trailing away' device, only to recur at the beginning of a subsequent turn:

(5.17)

120 Maggi: there is still so much to do....
121 MichaelC: I wasn't invited anywhere by anyone!
122 Ying-Lan: That's wonderful to have a special Christmas
in Norway.
123 Maggi:but i AM NOT MAKING MYSELF CRAZY

The text in turn 120 is linked to the text in turn 123 by the suspension dots at the end of turn 120 and at the beginning of turn 123. This use of suspension dots can be seen as a device for the breaking up of long turns. That is, rather than posting a long turn which might be ignored by others, participants frequently send the message in short bursts linked by suspension dots. This feature of SCMC was noted by Murray as early as 1988. Hentschel (1998) claims it is utilised to prevent others from taking their turn; in some respects it is a floor-holding device, but as we see in section 5.4 below, turn-taking cannot be prevented like this in SCMC. It may be that use is made of suspension dots in part to increase interactivity (and hence enjoyment) in the SCMC medium.

Participant naming

Participant naming is the second cohesive device characteristic of written (as well as spoken) conversation which we consider here. It has three faces in SCMC discourse: firstly, the system-generated prefacing of a turn with the sender's name; secondly the user adaptation of this, made possible in some SCMC environments by the inclusion of a relevant performative verb; and thirdly the addressing of participants by name within turns. Naming has wider scope than this cohesive role, of course. In Chapter 4 it was discussed as it pertains to issues surrounding roleplay and identity in SCMC discourse.

The system-generated feature prefates each turn with the name (user name or nickname) of its sender. We have previously discussed this with regard to the question of identity and anonymity. In its simplest form, as with all the examples thus far in this chapter from log S051 recorded at *The Palace*, it consists of the name and a colon. Hence in this stretch of text we know the senders of turns 107 to 109 are Maggi, MichaelC and Ying-Lan respectively:

(5.18)

```
107 Maggi: big party apparently...
108 MichaelC: Apparently?
109 Ying-Lan: Big party for what?
```

The downloaded log from interaction in such environments resembles the script of a play. In some SCMC environments, systems designers have enabled a more sophisticated representation of the online activity. This is the case with the text of the discourse at *Tapped In*. The example below is from log S141, recorded at *Tapped In* on 7 October 2001:

(5.19)

```
BJB [HelpDesk] waves good day to Maggi
JohnSte says, "Hi, Maggi."
VanceS says, "Hi Maggi"
MargaretD exclaims, "Hi BJB!"
Sue [guest] says, "Hi Maggi"
```

Tapped In allows for the sending of third person comments and actions, as discussed in Chapter 4. BJB is therefore able to produce the byplay of the first turn of example 5.19 by typing the command '/wave to Maggi good day'. The default performative verb is 'says'; when a turn ends in an exclamation mark, this becomes 'exclaims'; and when the turn ends with a question mark, the verb is 'asks'. So in an environment such as *Tapped In*

the system-generated feature of participant naming is coupled with the use of a performative verb, the use of which can be controlled to some extent by participants.

The final way in which naming helps participants to ascribe coherence across turns is when it is used by participants within their turns. This happens in spoken conversation, but as a cohesive device in a medium devoid of face-to-face or voice contact it assumes great importance. As a way of directing turns, it results from the lack of prosodic and paralinguistic cues available in spoken discourse. Werry (1996) calls this feature *addressivity*, while for Herring (1999) it is known as *cross-turn reference*. In three-party SCMC (for example in log S051, the source of most examples in this section) it is not as prevalent as it is in discourse with many more participants. When the stretch of text below was recorded at *Tapped In* there were eight active participants. Naming is prevalent, and addressing by name for cohesion across turns can be seen between turns 1 and 3, and turns 4 and 5:

(5.20)

- 1 Sue [guest] says, "Hi Maggi"
- 2 MargaretD says, "Hi guys"
- 3 MargaretD says, "Hi Sue"
- 4 VanceS asks, "We have a guest, Dianne. Did you come for our meeting, Dianne?"
- 5 DianneA says, "Yes Vance just to watch and get a feel for what webheads is about .."

Addressivity and its relation to representing features of speech in writing has been discussed in the previous chapter, section 4.2.3.

In summary it should be noted that coherence, even coherence reflected in cohesion, is always dependent upon background knowledge of some sort. Even with the most straightforward anaphoric referential relations, participants need at least to have an implicit knowledge of the cohesive nature of, for example, 'John ... he'. Furthermore, we find that we appeal to a different kind of knowledge, to encyclopaedic or schematic knowledge, when we posit a cohesive relation between some lexical items. Cohesion in SCMC, while being the aspect of coherence which is most closely tied to the text, also depends at times more explicitly on some background knowledge. And we cannot rely on a description of cohesive relations alone to determine what makes a written conversation coherent for its participants. In the following sections of this chapter propositional coherence, sequential coherence, and the representation of background knowledge are discussed with reference to SCMC discourse. It is argued that these perspectives on

coherence require an appeal not only to the tangible textual record as it unfolds, but to other types of knowledge, most importantly of the topic or content, and of the way interaction is carried out in SCMC.

5.3 Propositional coherence and topic

We examine in this section the formal concepts of *proposition* and *macroproposition* in discourse coherence. Macroproposition in particular is found to be an interesting notion aiding in discourse topic definition. Yet, deriving as it does from studies of the processing of more traditional written discourse, it is argued that it has limited application to written conversation.

5.3.1 Proposition and macroproposition

A proposition is a formal logical unit; a notion developed from philosophy and logic and applied to discourse analysis *via* text linguistics and studies of cognition in (principally written) discourse (Kintsch, 1974; Kintsch and van Dijk, 1978; van Dijk and Kintsch, 1983). Van Dijk and Kintsch note (1983:109) that the literature on propositions is vast. Here we discuss propositions only insofar as they relate to aspects of coherence.

In a text analysis approach, for example, the text-processing model of Kintsch and van Dijk (1978), a proposition is a theoretical unit intended to capture the meaning representation of a text. It is presented as a way of ascertaining formally what the text is about. By reducing text to elemental propositions, the content or essential meaning of the text is ascertained. A proposition contains a predicate (for example, a main verb, an adjective or a connective) and an argument or arguments (for example, nouns, embedded prepositions). The stretch of text under analysis is segmented into propositions – primary functional units – which can then be analysed to determine the propositional coherence of the text. On this micro level in the text processing model, coherence refers to the way in which individual propositions are interrelated in a coherent fashion. This is to say, a text which displays propositional coherence contains connections which hold logically or in fact. Texts with propositions which fit together conceptually, that is, which share a common argument, have high propositional coherence. Where inferences must be made, coherence is weakened. Thus, with reference to reading comprehension in language teaching, Widdowson (1979) proposes a process of ‘discourse decomposition’, of breaking up a written text into a set of constituent propositions. The aim of this is: ‘to

separate out the different propositions which are contained within the passage and to make them explicit' (1979:79).

Let us examine an example from the text of *Webheads* discourse:

(5.21)

MichaelC: In answer to your q Ying - yes I think Vance is
visiting family in the US.
Maggi: he said so in his last email to the group.

Taken as a whole, the two statements from different participants display a weakened propositional coherence due to the fact that a number of inferences must be made. In the case of *he* in Maggi's turn ('he said so') the inference made is a bridging inference (van Dijk and Kintsch, 1983:49): One must infer that *he* refers to *Vance* (in MichaelC's turn) as a bridge between the primary truths in the two propositions. Thus even turns which together may be regarded as cohesive through reference (Vance/he/his) display a less-than-perfect propositional coherence because of the element of inference necessary to bring meaning to the text.

Propositional coherence can thus illuminate semantic relations and connections which hold logically on a micro level. It serves also to remind us that in discourse, coherence is not a property of text itself but of the interaction between text, participants, and other contextual factors.

Macrostructure and topic

Van Dijk and Kintsch (1983) also address higher levels of discourse structure, or *macrostructure*. During reading, say van Dijk and Kintsch (1983:232), macrostructures are formed or inferred by the reader. In traditional written discourse, for example in a newspaper article, there are cues provided by the journalist and editor for such inference: headline, or initial thematic sentence, for example (1983:209). The formation of macrostructures by the reader is through the derivation of macropropositions about the text, though not only from such cues as are provided by the producer of the text. Text macrostructure, as Graesser *et al.* (1997:296) say: '... interrelates larger segments of text by virtue of world knowledge and genre schemata.' One could say that textual links are augmented by broader background knowledge to create propositional coherence on the macro scale.

There is a contradiction at the heart of any model for claiming propositional coherence. This rests on the belief that the elemental meaning can be derived from the text through a formal procedure which is ultimately subjective. This is to say, one person's macroproposition may not be the same as another's, due to the differences in background knowledge of the individuals. Having said that, it is perhaps unlikely that the two macropropositions will be entirely different, at least between members of a particular speech or discourse community. Nonetheless, it is impossible for there to be any single, generally accepted interpretation of a text. This is recognised by van Dijk and Kintsch, who say (1983:202): 'As language users will bring to bear different sets of knowledge, beliefs, etc., on the interpretation, it is likely that different macrostructures might be derived.' A problem lies with the complex formal procedure prescribed in the literature on propositional coherence by which propositions are developed. What, one may reasonably ask, is the point of undertaking such a procedure when the result is a topic sentence or statement which is the interpretation of the individual analyst?

Brown and Yule are fierce in their criticism of any attempt to claim a formal basis for deriving an essential topic from a text. In their critique of van Dijk's earlier (1977) work they have the following to say (1983:110):

What must be of concern to linguists interested in notions such as 'discourse topic' is the fact that the formal means of identifying the topic for a piece of discourse claimed by van Dijk is in fact, an illusion. Neither the topic representation nor the semantic representation of the whole text derive from anything more formal than the analyst's interpretation of what the text means.

One person's interpretation of the proposition or macroproposition may differ from another's, according to contextual and individual cognitive differences. Brown and Yule (*ibid.*) continue their criticism thus:

At best, this is a formula for determining, not the *topic* of a discourse, but the *possible topics* of a discourse. If we can already determine the possible topics of a discourse without recourse to logic, then the elaborate translation into logico-semantic representations is redundant.

In simple terms then, the macrostructure is no different from the 'pre-theoretical' definition of topic as 'what is being talked about' (Brown and Yule, 1983:71); and it is recognised that such a definition may differ from speaker to speaker, or from reader to reader.

5.3.2 Topical coherence: a prelude

The notion of discourse topic or *aboutness* in discourse is important not least because it is at face value a likely source of coherence. It also figures as an element of the

conversational floor, proposed as an organising principle of SCMC discourse and examined in detail in Chapter 6.

It would seem that coherence is evident if participants in the discourse can say what is being talked (or, in the case of SCMC, written) about. ‘What is being talked about’ is suggested as a useful, if ‘pre-theoretical’, definition for topic in discourse by Brown and Yule (1983:71). However, topic is a slippery thing, and attempts to specify what discourse is *about* often run into some difficulty (*viz.* the problems surrounding propositional coherence).

In spoken discourse analysis it is on the whole agreed that: ‘...something is only a topic if more than one speaker makes an utterance relevant to it’ (Brown and Yule, 1983:89-90). For example, Tannen, in her study of dinner table conversation, notes (1984:41) that: ‘...although Peter [a participant] clearly ‘raised’ the topic, the fact that it became a topic for extended talk was the work of other participants.’ In SCMC also, this *interactive* definition of topic (McCarthy, 1991:132) is axiomatic. But how do we know when a particular topic is evident? Are the same topics recognised by all participants, or do individual participants pursue their own topics within some broader organisational frame? And where does one topic end and the next begin? These questions are further complicated in SCMC discourse where two or more topical threads often seem to be running together in parallel.

The following principles regarding topic are carried through to the next chapter. Firstly, the ultimate subjectivity of *topic* is clear. However formal its identification may seem, topical coherence, as with all forms of coherence, is fundamentally subjective. And secondly, topic cannot be separated from other aspects of coherence covered in this chapter on both the micro (cohesion) level and the macro level of sequential coherence and background knowledge (sections 5.4 and 5.5 below). In Chapter 6 topic in SCMC discourse is investigated at greater length. Topic is considered together with the communicative function of the ongoing discourse, as well as the current role relations of the various participants. By doing this, it is possible to provide a plausible account of certain patterns of floor development in SCMC discourse.

5.4 Sequential coherence and disrupted turn adjacency

In this section we discuss matters of adjacency, discussed here under Herring’s ‘unified rubric’ (1999:7) *sequential coherence*. We also bring into the discussion other comments on

turn-taking in SCMC. Models of spoken discourse cannot be directly applied to illuminate the turn-taking process in SCMC. Nonetheless certain principles are relevant from the tradition which fostered interest in patterns of turn-taking: conversation analysis. We come to these principles in due course.

With regard to sequential coherence in SCMC, there are two features to note at the outset. Firstly, that turns are loosely cohesive primarily because of system-related constraints on turn-taking, and also because of the relative paucity (in comparison with face-to-face spoken conversation) of paralinguistic and prosodic cues. These constraints lead to what we term (again following Herring, 1999) *disrupted turn adjacency*. Secondly, this system-related lack of cohesion does not lead automatically to incoherence. This has much to do with participants' knowledge of turn-taking in SCMC and their expectation that cohesion will be loose. In later sections we examine further such aspects of participant knowledge. In this section we take a view of disrupted turn adjacency which, while largely informed by conversation analysis, finds some of its principles do not apply directly to SCMC discourse.

A distinction is made here between disrupted turn adjacency and the existence of multiple threads of conversation. The latter feature, called *interleaved exchanges* by Herring (1999), is the property in SCMC for two or more unrelated threads of conversation to be running together. This phenomenon, closely associated with the development of the conversational floor, is more a feature of multi-party SCMC.

Here is a brief example of multiple threads from the *Webheads* log S051, discussed in section 5.2 of this chapter and reproduced as Appendix 3:

(5.22)

```
91  Maggi: peek-a-boo!
92  MichaelC: In answer to your q Ying - yes I think Vance
      is visiting family in the US.
93  Maggi: he said so in his last email to the group.
94  MichaelC: Ying - you're avatar looks very tired!
95  Ying-Lan: It is important to be our family in Y2K New
      Year coming.
96  Maggi: like I feel...
97  MichaelC: I feel quite bonny!
98  Maggi: I was invited to Zurich, but I think I will stay
      home.
99  Ying-Lan: Yes, I am tired.
100 MichaelC: I guess you got up early to study for your
      test Ying?
```

Turns 91, 94, 96, 97, 99 and 100 belong to one thread, while turns 92, 93, 95 and 98 belong to a second. Multiple threads are discussed in Chapter 6 in relation to conversational floors. For now they are left aside.

We return to disrupted turn adjacency. Cohesion has already been considered the textual manifestation of coherence, that which is most closely related to the text of the discourse. Like Goldberg (1983:25) we could view coherence as being reflected in two elements of cohesion: ‘... the serial arrangement and the grammatical makeup of successive sentences ...’. The role of grammatical structure at the clause level is, as mentioned in section 5.2, taken as read here. The role of lexicogrammatical cohesion was also outlined in section 5.2. In these areas, cohesion is similar, though by no means identical, in SCMC and in spoken discourse. The serial arrangement of turns is a different matter.

Our example here is the stretch of text from turn 4 to turn 7 of log S051:

(5.23)

- 4 MichaelC: Good evening Ying. How are things?
- 5 Ying-Lan: Not so good.
- 6 Ying-Lan: I took a test this morning.
- 7 MichaelC: What's wrong?

In comparison with two-party spoken conversation, dyadic written conversation displays a reduced sensitivity to coordination of transfer in turn-taking. This lack of fine-tuning is the responsibility of two fundamental facts of this type of SCMC discourse: 1) turns cannot be seen until after they have been sent; and 2) the visual and auditory (paralinguistic and prosodic) cues which in spoken discourse underpin the turn-taking system are missing. The consequence is disrupted turn adjacency.

A number of commentators on linguistic features of SCMC note the dissimilarity of turn-taking patterns in SCMC and in spoken discourse. There is a detailed treatment in Cherny's (1999) pioneering research, and in work by Herring (1999). The following comment from Chun (1994:26) is illustrative of the view that turn-taking in SCMC is entirely unlike that in spoken discourse: ‘In terms of discourse management during a discussion, turn-taking as done in spoken conversation is not a factor in CACD [computer-assisted class discussion].’ Kitade (2000:149) claims that there is ‘no turn-taking competition’ in SCMC.

Herring describes disrupted turn adjacency in SCMC (1999:3): ‘... a message may be separated in linear order from a previous message it is responding to, if another message

or messages happen to have been sent in the meantime.’ And in her early study of SCMC, Murray (1988) notes that: ‘... the sender may make a second move before receiving a response to the first and a message may interrupt a turn.’

Seminal conversation analysis research following an ethnomethodological approach (for example Sacks, 1995; Sacks *et al.*, 1974; 1978) has pointed out that in two party conversation: ‘... the basic sequencing format is A-B reduplicated’ (Sacks, 1995:95). That is, one party talks, then another. Sacks *et al.* (1978: 9) develop this insight: ‘... there are techniques for the construction of utterances relevant to their turn status that bear on the coordination of transfer and on the allocation of speakership.’ Ascertaining the nature of the rules and systems pertaining to coordination of transfer has exercised conversation analysts greatly (see for example Nofsinger, 1991; Tannen, 1986).

In the stretch of text in example 5.23 above, turns 4 and 5 follow the pattern of an *adjacency pair* (Schegloff and Sacks, 1973). In an adjacency pair the relationship between the first and second pair parts is one of *conditional relevance* (Schegloff, 1972). Put simply, the presence of the first pair part is said to open a slot in conversation for an expected, or conditionally relevant, second pair part. MichaelC’s first pair part (turn 4) is followed by the second pair part (5) from Ying-Lan. This response, ‘not so good’, is a *dispreferred response* (Heritage, 1984:265-269; Nofsinger, 1991:71-2). That is to say, although the response is expected, or conditionally relevant, it is not *as* expected (or *preferred*) as a response such as ‘I’m fine thanks’. Following a tendency noted in dispreferred second pair parts, the response is followed by an elaboration in turn 6. But MichaelC’s next turn (7) seems to be in response to Ying-Lan’s turn 5 rather than turn 6. This is a case of disrupted turn adjacency.

The disrupted turn adjacency in this extract may well be a result of reduced coordination of transfer in that MichaelC was typing turn 7 at the same time as Ying-Lan was typing her elaboration following her dispreferred response (turn 6); it happened that they sent their turns at about the same time, but Ying-Lan sent her turn fractionally before MichaelC sent his. Thus it appears in the log of the chat, and appeared at the time on the screen, that Ying-Lan answers MichaelC’s question before he asks it.

An alternative, and rather problematic, possibility is that the turns appeared in different orders on different computer screens. When considering the technology of SCMC we should recall that not all aspects of the discourse setting are shared. Individual computers have varying levels of processing power. Internet connections have different speeds.

Turns thus potentially arrive on different screens in different orders. Evidence of this phenomenon – system-related disrupted turn adjacency, or ‘lag’ (Herring, 1999) – can be seen in the following stretch of SCMC discourse text recorded on ICQ:

(5.24)

```
<ying> We hope our government will be better in the future.  
<Mad> really bad karma then.  
<ying> Who is Gerald Ford?  
<Vance> What were his words? Why did he have to land in an  
elementary school? Yeah, not a good choice. Sounds like  
something Gerald Ford would have done. But he was harmless.  
<Vance> He was a preseedent of the USA who was prone to  
accidents.
```

Ying poses the question: ‘Who is Gerald Ford?’ before, it seems, any mention of Gerald Ford has entered the conversation. We can assume that Vance and ying’s turns appeared in the logical sequence on their own screens but because of a system delay appear in the logs in reverse order. A further explanation may lie with the fact that ICQ is two-way SCMC (that is, unlike most SCMC systems, turns can be seen by other participants as they are being typed). Thus ying may have posed her question and sent it while Vance was still typing the last sentence of his turn.

We cannot be certain how common a system-related disrupted turn adjacency is. Unless there is some explicit reference to a later turn, the explanation for disrupted turn adjacency might equally be the first posited above: that turns were being written at the same time, and one was posted fractionally before the other (thus appears out of place). On a broader level, these observations on disrupted turn adjacency tend to support the view that applying models of turn-taking in spoken conversation directly to SCMC discourse, as Cherny (1999:174) notes, is not particularly helpful.

Yet by focusing on disrupted turn adjacency we can engage with some useful notions from the tradition of conversation analysis. In following a conversation analysis approach to the analysis of discourse, the analyst is required to orient towards the participants’ concerns that what is said in conversation must be accounted for. This was noted when we discussed conditional relevance: participants expect certain things to happen in conversation, such as a second pair part to follow a first pair part. What is more, some responses are more expected than others; hence the elaboration of the ‘marked’ second pair part observed above. Taylor and Cameron summarise this accountability of behaviour in interaction as one of the central pillars of conversation analysis (1987:102): ‘Ordinarily the relevant rules will be followed; but when they are not followed, the co-

interactant can be expected to look for reasons why.’ Schegloff and Sacks’ (1973) have a shorthand phrase for this accountability: ‘Why that now?’ As Schegloff says (1990:55):

Analysis must resonate the concerns of hearers, and (by virtue of speakers’ orientations to hearers’ orientations) those of speakers as well. From that point of view, the issue of coherence is systematic and omnipresent, and is subsumed under, and as one version of, the generic question for parties to conversation ... “Why that now?”. From this point of view, nothing in the succession of talk or other conduct in interaction can be omitted.

However, in SCMC much of what is written in the conversation cannot be accounted for; at least not immediately. This reduced interactional coherence (Herring, 1999) is, as we have seen, a notable feature of SCMC which does not lead participants to reject the discourse as incoherent. There is a contradictory principle to the ‘Why that now’ rule, from the same ethnomethodological tradition. This is the ‘let it pass’ rule (Garfinkel, 1967) whereby participants assume that conversational difficulties will be remedied as conversation proceeds. Participants in SCMC know that turns are not seen until they are sent. By extension they know that turns may not be immediately relevant to one another. Also their relevance may have already passed by the time they are sent. So by appeal to this aspect of participant knowledge we can rephrase the ‘let it pass’ rule as it applies to SCMC to state that conversational difficulties either will or will not be remedied as conversation proceeds.

Recognition of the knowledge participants have of the system-related effects on turn-taking and coordination of transfer in SCMC has certain implications for its analysis. It should be borne in mind that when SCMC interaction originally takes place, participants can see the text unfolding on their screens. They are also able to scroll back up the screen to re-read previous parts of the interaction. Furthermore, a particular feature of one *Webheads* SCMC environment, *Tapped In*, is that transcripts of members’ interaction for the duration they are logged on to the system are emailed to them after they log off. These properties raise interesting questions about the relationship of text to discourse. There is a common clear distinction between text and discourse, summarised by Seidlhofer and Widdowson (1999:206), where ‘*text* is the linguistic product of a discourse process.’ In the case of spoken discourse analysis, the interaction is usually recorded and transcribed prior to analysis, effectively separating the text from the context. Regarding SCMC, participants have immediate access to the linguistic product of the discourse process. They can read the text (the product) as the interaction (the process) unfolds. Cook (1995:43) discusses interpretation of written versus spoken discourse:

Writing removes the receiver of language from the obligation to process temporally and enables the reader to move backwards and forwards in text. This means that the interpretation of any given section may be affected by what comes afterwards as well as what comes before. In speech this is not the case. ... Although there is following co-text in transcription it must remain irrelevant to analysis.

In this respect, and in contrast to many other aspects of SCMC, the discourse is more written-like than spoken-like.

SCMC discourse thus differs in an important way from spoken conversation. For an illustration of this, we can examine an instance of multitasking from *Webheads* text.

Participants in SCMC discourse may be attending to a number of activities on- and off-screen at once (see Chapter 3 for a discussion of polyfocal attention and multitasking). They also leave their computers from time to time while the interaction continues. This may affect the way they view the text of the discourse. Upon returning to the computer, or to the text box on the screen, a participant is able to scroll up the screen, gather the thread of the discourse and pick it back up.

We see this type of exchange, an example of *narration* as discussed in Chapter 4, recorded at *Tapped In*:

(5.25)

```
SusanneN says, "I'll be back in ten minutes"  
BJB [HelpDesk] nods  
SusanneN exclaims, "Take care!"
```

72 turns later, SusanneN returns to the conversation:

(5.26)

```
SusanneN exclaims, "Hi all of you, I am just reading today's  
log up to now, back from lunch!"
```

In spoken discourse, and upon re-joining a conversation, a participant might ask another to 'fill me in', to summarise the ensuing interaction (see Bublitz and Lenk, 1999, for a discussion of 'disturbed coherence'). In SCMC participants can read the product upon rejoining the process, as SusanneN does in example 5.26. This has implications not only for the propensity of topics to recur, and the subsequent impact this has on conversational floor structure (see Chapter 6 on recurring topic and floor) but also for the way in which the text of the discourse is viewed by the analyst. If participants themselves view the text as 'product', this in effect frees the analyst from the obligation to gather a sense of the 'ongoing' or 'unfolding' nature of the discourse for the purposes of analysis (*viz.* Cook, *ibid.*). In this respect, analysis of SCMC discourse can take into

account the following co-text in a way ‘prohibited’ to the analyst of a transcript of spoken conversation.

Thus far in this chapter the textual product of the discourse process has been the focus. We first briefly investigated lexicogrammatical and propositional cohesion as it pertains to SCMC; then we turned to features of turn-taking and sequential cohesion. It has been stressed that a text does not necessarily have to be cohesive to be coherent. Coherence is accorded to discourse by participants who draw on various kinds of knowledge. This may well be, of course, implicit knowledge of textual relations (cohesive or propositional), or of turn-taking patterns in SCMC. In the following section, 5.5, we pay particular attention to areas of background knowledge upon which participants in SCMC draw.

5.5 Background knowledge

The knowledge required to claim a measure of communicative competence within a community can be regarded as congruent with the knowledge required by participants to ascribe coherence to the discourse. That is, we conceptualise both coherence and communicative competence as being contingent on similar types of knowledge. In Chapter 3, four elements of electronic communicative competence were discussed with reference to SCMC discourse: linguistic competence, discourse competence (subsuming multimodal competence), technological competence, and sociocultural competence. In this section, we associate the notion of *schemata* with certain of these elements of communicative competence. First we refer to two aspects of schematic knowledge: formal and sociocultural. Then through the use of examples we demonstrate that there may be a number of sources of background knowledge to which participants may appeal at any one time in a quest for coherence.

5.5.1 Schematic knowledge

Background knowledge, and the way it is stored in the mind, is characterised in the literature on coherence, cohesion, conversation, discourse and text analysis in a number of similar but different ways. The most commonly used term for the storage and utilisation of background knowledge is *schema* (pl. *schemata*) (Bartlett, 1932); related concepts include *inter alia* scripts and plans (Schank and Abelson, 1977), prior text (Becker, 1988), and prior experience (Tannen 1990). A schema is the mental

representation of a typical instance (Cook, 1994:11) which is: ‘used in discourse processing to predict and make sense of the particular instance which the discourse describes’ (*ibid.*). We refer to types of *schematic knowledge* (Widdowson, 1983; 1990) to cover some areas of background knowledge of concern here. Schematic knowledge as defined by Widdowson is ‘common knowledge of shared experience and conventionally sanctioned reality’ (1990:102). It is invoked when it is necessary to refer to:

... more general and conventional assumptions and beliefs which define what is accepted as normal or typical in respect of the way reality is structured and to the conduct of social life. ... It is the knowledge which is acquired as a condition of entry into a particular culture or sub-culture (Widdowson, 1990:102).

Unlike cohesive links, schematic knowledge is not a trace of coherence present in the text of the discourse, but exists as the background knowledge which participants draw on when making sense of text, that is, in their effort to render it coherent. Two areas of schematic knowledge are outlined here.

Formal knowledge

In traditional written discourse, *formal* knowledge is: ‘background knowledge about the formal, rhetorical, organizational structures of different kinds of texts’ (Carrell, 1983:83-4, in Widdowson, 1990:104). To extend the definition to SCMC discourse, formal knowledge would include a knowledge of what a participant would expect to find when joining any SCMC discourse. This would be the general characteristic discourse patterns of SCMC: all SCMC discourse has the propensity to involve multiple threads of conversation and disrupted turn adjacency, for example. This knowledge would also be of interface and navigational tools, and of how to write and send turns. In more established literacy traditions it is taken for granted that production will involve writing with some implement or other. In the case of SCMC discourse, the very act of being able to be a participant requires a certain amount of technical ability. We have called this technological knowledge. We might therefore view formal schematic knowledge as corresponding with areas of the *discourse* and *technological* elements of a model of electronic communicative competence.

Sociocultural knowledge

Another side of schematic knowledge is *sociocultural knowledge* (Gumperz, 1977). It has been stressed at points in this thesis that however similar the system design of different virtual environments, interaction can differ widely between virtual communities. Sociocultural knowledge is the knowledge of how to interact in a particular community. There is some correspondence here with what Halliday refers to as the interpersonal

metafunction of language (1994:xiii): ‘to act on the others in [the environment]’. And there is direct correspondence with the *sociocultural* element of electronic communicative competence outlined in Chapter 3, section 3.4: a knowledge and ability for use of the sociocultural rules of a particular virtual community; of what is appropriate verbal behaviour in such a community.

Associated with sociocultural knowledge is *contextualization*: ‘The process by which we evaluate message meaning and sequencing patterns in relation to aspects of the surface structure of the message, called *contextualization cues*’ (Gumperz, 1977:199). Gumperz suggests that contextualization expectations are ‘highly culturally specific; that is, they are dependent on interactants’ ethnic or communicative background’ (*ibid.*). In the case of online communities, the participants may vary widely in ethnic and linguistic background, but there is a shared aspect to their culture: the online experience with other participants in the virtual community. Discussion in Chapter 4 of the differing conventions of IRC and the *Webheads* discourse includes the suggestion that variation in features such as reciprocation may exist between virtual communities. The members of these communities may have no common cultural background other than the online one. Nonetheless, linguistic and discourse features emerge which are specific to a particular virtual community.

5.5.2 Appealing to background knowledge: Three examples

Appeal to discourse and sociocultural knowledge

Compare the following examples, firstly from *Webheads* (logged during a virtual Halloween party), and secondly from an internet chatroom called *Liverpool at Night*:

(5.27)

```
VanceS [spider] tries on a spider man costume
BJB chuckles...that look is good for you!
VanceS says, "it's a bit tight"
VanceS says, "sticky too"
BJB looks at all the rippling muscles
```

(5.28)

```
>>>©HÖ©&<< : pmsllllllll
  ▸ Divinepaula2 is away.
The_Toffeeman0 : lmfaoooooo
>>>©HÖ©&<< : mick
erinschild : i think on a hair disaster
```

erinschild :
 Franny_er : omfg !!!!!!!!!!!!!!!!
 2002HAbp x HAbp 2002 : LOL
 »»x©HÖ©x«« : lol
 FinestKitty4 : in other words a walkin geek
 ▸ OPEN_YOUR_EYES_ has left the conversation.

Participants in each case need not only a general knowledge of what to expect in SCMC discourse (an appeal to formal schema), but also a knowledge of what is typical in individual communities (an appeal to sociocultural schema). The features which the two examples above share are those characteristics of all one-way SCMC: it is human-human interaction via computers, it takes place in real time, turns cannot be seen until sent, and participants can scroll up the screen to re-read previously sent turns. In the case of *Webheads*, as seen in example 5.27, interaction with virtual objects and various types of roleplay are the norm. This type of verbal behaviour, called *byplay*, was discussed in Chapter 4. In the example from the chat room (5.28), short turns, heavy use of acronyms and abbreviations, a large number of concurrent participants, multiple threads of conversation and very loose sequential cohesion seem to be characteristic of this particular community.

Appeal to linguistic, sociocultural and technical knowledge

A certain level of knowledge of the linguistic system (English in the case of *Webheads*) is, naturally, essential for successful participation in the discourse. A question for participants in the *Webheads* group, dedicated as it is to English language learning, is the level of English required for effective participation. The introductory note on the *Webheads* website states that participation in the *Webheads* group is possible: ‘... if you can understand this.’ It is certainly the case that some learners with *Webheads* have quite low levels of English. There are a number of reasons why the level of English necessary for participation may not be especially high. The first reason is the ability participants in SCMC have of scrolling back up the text of the discourse to re-read previous turns. Allied to this is the associated ability to save and download logs of discourse text for later investigation. These facilities have been presented as an important advantage in language learning with text-based SCMC by a number of commentators (for example, Kelm, 1992; Kern, 1995b; Beauvois, 1992). We return to this issue in Part Four, Chapters 7 and 8. The second reason is that it is conventional behaviour both in the *Webheads* group and more broadly in SCMC discourse in general to provide clarification for those who

request it. Such assistance varies from environment to environment, and is particularly high in a multi-user domain such as *Tapped In*. Thus the linguistic, technological and sociocultural dimensions of electronic communicative competence are intertwined.

In the example below, Ying-Lan's second turn is a request for clarification, which she receives.

(5.29)

Ying-Lan: @64,64 !It's Ying-Lan
Brazil: Hi Ying.
Brazil: We are in ICQ .. Wanna Join us ??
Ying-Lan: What did you mean "We are in ICQ"?
Brazil: We are chatting in ICQ.. Vance, Gosia and I...

Ying-Lan did not understand Brazil's meaning; nonetheless she assumed it was relevant and thus strove to ascertain the meaning. Such attempts to create coherence are termed in the literature of second language acquisition incidental *negotiation for meaning* (see Blake, 2000, for discussion of negotiation for meaning in CMC contexts). We return to discussion of negotiation for meaning in Chapters 7 and 8.

Returning to the above example, it becomes apparent later in the interaction that Ying-Lan knew what ICQ was, but did not understand that 'We are in ICQ' means 'We are chatting in ICQ'. We can ascertain this by looking at the four turns which followed:

(5.30)

Ying-Lan: why?
Brazil: Gosia is having trouble with the palace
Vance: Oh hi Ying Lan.
Ying-Lan: Ask Vance to invite me to chat.

Ying-Lan's final turn in this stretch shows that she is familiar with the fact that ICQ is a chat program, and that participants have to be 'invited' to chat. Thus to ascribe coherence to the discourse, she needs the following:

- some, though not necessarily great, linguistic knowledge
- sociocultural knowledge (she knows her appeal for clarification would attract a response)
- technological knowledge (she knows how to join a chat in ICQ).

Appeal to technological and sociocultural knowledge

Simply to reach the position of being able to join a virtual community and participate in SCMC discourse requires technological knowledge, access to the computer hardware, and a reasonably stable connection to the internet. The relevant software must be downloaded to enable the use of the particular SCMC tool via which the discourse may proceed. To successfully integrate voice and video into the discourse requires further technological manipulation.

We return to an extract first presented as example 5.2 at the beginning of this chapter:

(5.31)

BJB asks, "welcome back, Roslyn...better connection now?"
RoslynT says, "o"

At the time it was maintained that RoslynT's turn was coherent for the participants and for the analyst. In the next turn we find:

(5.32)

BJB . o O (uh, oh...is that o as in no?)

BJB's turn (sent as a 'think' command: see Chapter 4) is an explicit attempt to make sense of RoslynT's turn 'o', thus to render it coherent. She creates coherence by appealing to knowledge that there are technological difficulties associated with participating in SCMC discourse. The sociocultural element is evident in the fact that RoslynT's difficulties with communication attract BJB's attention and she is willing to assist. As noted above, in some communities the communication problems of participants attract attention and helpful assistance; in others they do not.

5.6 Conclusion

In Chapter 3 we outlined four areas of electronic communicative competence, framed in terms of knowledge of certain kinds. To recap, these are: a knowledge of the linguistic system, a knowledge of discourse patterns, a knowledge of the technology involved, and a knowledge of the sociocultural rules. This chapter on coherence has largely been concerned with the knowledge of discourse patterns, though the final section on background knowledge has drawn into the discussion the other, broader areas of competence. Section 5.2 dealt with cohesion in SCMC discourse: we found that while

cohesion operates in similar ways in SCMC and in spoken discourse, there are both differences and SCMC-specific cohesive features. In section 5.3 the discussion was on the difficulties associated with ascribing coherence through links of propositions, both macro and micro. Under question was the extent to which it is necessary to undergo a complex and quasi-formal procedure to derive what ultimately are subjective statements of the discourse topic. The particular ways in which sequential coherence acts in SCMC discourse were the focus of section 5.4: discussion of the interplay of the participants and the technology was central here. And in section 5.5 the broader aspects of coherence were outlined as areas of background knowledge including knowledge of the discourse patterns expected in SCMC, knowledge of the sociocultural expectations within a particular community; knowledge of the linguistic system, and knowledge of the technology. In the next chapter, the focus remains on patterns in discourse text, though, as should now be clear, the development of such patterns does not occur in isolation of broader aspects of discourse.

Chapter 6. Topic and conversational floor in SCMC discourse

6.1 Introduction

This chapter is concerned with discourse patterns in SCMC. At issue is the development of particular notable discourse patterns referred to elsewhere as *threads* of written conversation (see Chapter 5, section 5.4). Such threads are a striking feature of the discourse text when two or more run together in parallel. This phenomenon is also known as an *interleaved exchange* (Herring, 1999). In this chapter, two interrelated concerns of SCMC discourse are discussed in relation to conversational threads, with reference to the data from the *Webheads* logs. These are *topic* and *conversational floor*. Both are considered as notions which help participants in SCMC to ascribe coherence to the discourse.

We begin with the reasonable assumption that conversational discourse is organised around what is being talked about (Keenan and Schieffelin, 1976; Brown and Yule, 1983; Tannen, 1984; Reichman, 1985; 1990; Hobbs, 1990), and that discourse topic serves in some way to provide an explanation of how and why patterns in discourse text emerge as they do. However, an investigation in section 6.2 of this chapter leads to the suggestion that topic alone cannot account for patterns in SCMC discourse. What drives topic shift and drift seems to be related to wider elements of discourse, such as the purpose of the interaction, the number of participants and their role relations at the time, and specific SCMC features such as the ability to re-read the text as it unfolds.

Thus the notion of the *conversational floor* is introduced in section 6.3. The conversational floor involves the integration of topic, verbal activity (i.e. *how* things are said), participant role relations, and SCMC medium factors. Hence the conversational floor is proposed as a notion which, though topic-based, also allows for the discourse patterns to be explained in broader discourse terms.

6.2 Topic, topic shift and topic drift

6.2.1 Defining the topic

Topic can be defined according to a variety of frameworks, each with its own appropriacy for particular purposes. McCarthy (1991:132) notes five levels of framework, outlined in the table below with their identification characteristics:

Level	Identification
formal	markers (lexical or phonological)
semantic	single word or phrasal title
interactive	more than one speaker makes a relevant utterance
pragmatic	utterances perceived as relevant to one another by participants
surface cohesional	chains of lexical cohesion

Figure 6.1 Five levels of topic framework

A description of topic in synchronous CMC requires a definition robust enough to cater for the lack of spoken feedback, disrupted turn adjacency patterns and other interactional features of the medium. Furthermore, the definition here needs to be accordant with other elements of the conversational floor (verbal activity and role relations) discussed later in the chapter.

Formal definition

A formal definition of topic as identified by *phonological* markers is inappropriate for obvious reasons. However, the types of *lexical* markers which are associated with topic or transaction boundaries in a formal model of spoken discourse, for example, *by the way*, are extant in synchronous CMC discourse. Such markers are used in models of discourse associated with the Birmingham school of discourse analysis to identify and isolate the *transaction*, a unit of discourse similar to topic (Sinclair and Coulthard, 1975; Francis and Hunston, 1992; Tsui, 1994; Stenstrom, 1994). We discuss these markers further in the sub-section on abrupt topic shift below.

Incidentally, the transaction itself is found to be a problematic unit in the formal hierarchical description of spoken discourse developed by the Birmingham school. Even with the regularities and the rituals inherent in the classroom context within which Sinclair and Coulthard first worked (1975), the transactions they posited remained at a level of idealised abstraction that they themselves did not find particularly useful. For example, in the original Sinclair and Coulthard model, the structure of the transaction is described as containing a number of exchanges within a frame of boundary exchanges; however (1975:59): ‘We can specify no ordering for the bound exchanges [within a transaction]. ... but whether any or all [of the exchange types posited] occur, and in what order, is dependent on unpredictable reactions to and involvement with the teacher’s

presentation of the topic.’ When attempting to describe transactions in less ordered casual conversation, Francis and Hunston reached a similar impasse (1992:140): ‘The transaction differs from units lower down the rank scale in that while we can identify its boundaries, we can say little about its internal structure. We do not know how the various Conversational exchanges realising the M[ove]s combine, or even whether the structure of a transaction can be described in terms of linguistic patterning.’ Consideration of the transaction as a formal unit with a predictable internal structure in *written* conversation is equally unworkable.

Interactive and pragmatic definitions

The interactive and the pragmatic identifiers of topic are the knowable and unknowable sides of the same coin. In the case of this study we have no means of retrospectively ascertaining from the participants in the discourse whether or not they perceived a particular utterance from the data to be pragmatically relevant. And despite the principle in conversation analysis of conditional relevance discussed in Chapter 5, section 5.4 (whereby participants can reasonably expect relevant turns to appear next to one another), disrupted turn adjacency in SCMC often leads to unrelated turns being juxtaposed. Nonetheless, it is mostly (though not always) possible to infer from an examination of the text whether and which turns are relevant to one another, which might lead us towards a definition of topic which tends towards the interactive. We suggested in Chapter 5, section 5.3, that an interactive definition of topic is axiomatic in SCMC discourse. That is to say, a topic can only exist if more than one participant sends a turn which is relevant to it. There are instances in SCMC where a participant’s turn is not responded to (though is still, perhaps, read); if an interactive definition is maintained, then these turns fail to develop into topics.

The surface cohesion model

Identifying topic by surface cohesion, either referential or lexical, is a useful and interesting exercise. It must be recalled that when lexical cohesion involves relexicalisation (in the form of synonymy), the appeal is to encyclopaedic knowledge. In addition, when cohesion is of the reference type, we must work with the caveat encapsulated clearly in Brown and Yule’s summary of Morgan (1979): ‘We seek to identify the writer’s intended referent for a pronoun, since a pronoun can, in effect, be used to refer to almost anything. That is, what the textual record means is determined by our interpretation of what the producer intended it to mean’ (Brown and Yule, 1983:25).

We discuss how sub-topic shifts may be identified by surface cohesion of different types in the section on topic drift, 6.2.2 below.

A semantic definition

For our purposes, and with respect to later considerations of verbal activity and conversational floor, a definition of main topic which is primarily semantic is the most appropriate. A simple noun or phrase as a label for a topic suffices for a rough characterisation. Like Brown and Yule (1983:71), we can consider topic as ‘what is being talked about’. Though its derivation is somewhat less complicated, it can also be considered a ‘macroproposition’ (van Dijk and Kintsch, 1983) or ‘elemental sentence’ (Widdowson, 1979:79). See Chapter 5, section 5.3, for a discussion of these matters. It is accepted that this is a subjective position; nonetheless, as we discover shortly, even participants themselves may not actually agree on what the topic is at a given point. To illustrate this difficulty (if not to resolve it) it is instructive to attempt to determine where a topic begins and ends, which we do below.

6.2.2 Topic shift and topic drift

Topic change, shift, and drift, and the boundaries between topics, have been the subject of some spoken discourse analysis research, in particular in the tradition of conversation analysis (Schegloff and Sacks, 1973; Jefferson, 1984; Maynard, 1980; Crow, 1983; Brown and Yule, 1983 chapter 3; Hobbs, 1990). In the SCMC literature, Herring and Nix (1997, reported in Herring, 1999:9-10) investigate a characteristic of IRC, rapid topic drift, or topic decay. In a sense, defining a topic by its boundaries avoids the difficulty of saying what is and what is not a topic. However, ascertaining the point at which a topic changes is an awkward pursuit, complicated in SCMC discourse by system-related disruptions of sequential coherence and turn adjacency discussed in Chapter 5, section 5.4. Also, where there is difficulty ascertaining topic boundaries, the question is raised of the extent to which individual interlocutors actually share a topic.

In this section we discuss some ways in which topics change in SCMC discourse. We also point out the limitations of an approach which attempts to define topic boundaries with reference to the textual record of the discourse alone. The argument here is that broader issues relating to group membership and intimacy, as well as individual perceptions, play a role in dictating where and how one topic ends and another begins. In this respect, we prepare the ground for the more useful model for coherence in SCMC described in section 6.3 of this chapter: the conversational floor.

Topic change in SCMC as in spoken conversation can be abrupt (topic shift) or gentle (topic drift); thus topic boundaries can be more or less clear or opaque. It is also common in SCMC discourse for topics to recur. These patterns are discussed here. Most examples in this section are numbered turns taken from the stretch of discourse text from the *Webheads* log S010, recorded at the MOO *The Palace* on 27 December 1998. This appears as Appendix 4.

Abrupt topic shift

The extract below shows an abrupt topic shift:

(6.1)

```
6   Ying-Lan: ^I will do it after class.
7   Ying-Lan: ^Did you enjoy Christmas in UAE?
```

The turns are unrelated in terms of topic, which is to say, they are not about the same thing. In this case, and according to our interim ‘semantic’ definition, the topic of turn 6 is ‘inserting a picture into text’, and of turn 7, ‘Christmas’. Here we consider why topics shift abruptly as they do in SCMC discourse, and what parallels there are with abrupt topic shift in spoken conversation.

In spoken conversation, as Schiffrin (1987) has found, discourse markers abound. These are the ‘sequentially dependent elements which bracket units of talk’ (1987:31), and include such items as *oh*, *well*, *and*, *but*, *or*, *so*, *because*, *now*, *then*, *y’know*, and *I mean*. Some such markers are found to signal shifts in the speaker’s orientation to information; hence we might consider them potential topic boundary markers. For example, *oh* in Schiffrin’s data is often found to initiate ‘an information state transition’ (1987:99).

In SCMC discourse, this type of marker is also common. Example 6.2 shows two instances:

(6.2)

```
64   Maggi: @64,64 !It's Maggi
65   Maggi: Hi
66   Vance: Hey Maggi. I've just invited YL to browse over to
        Geocities and set up a web site.
67   Vance: Hey, how was your hot date?
68   Maggi: Ok...go ahead...oh that was fabulous!!!!!!!
```

Turn 64 is the automatically generated joining turn (the AJE – see Rintel *et al.*, 2001) announcing Maggi’s arrival; her first written turn is 65. In turn 66 Vance greets Maggi

and brings her up to date with the continuing activity (see 6.2.3 *recurring floor*). In the next turn, 67, he signals a topic shift with

hey [how was your hot date]

Turn 68 is in two parts: the first part

OK...go ahead

is a response to Vance's turn 66. The second part, with a topic shift signalled with *oh*

oh that was fabulous!!!!!!!

is in response to turn 67.

SCMC differs from spoken discourse here in the way it is quite normal in one turn to respond to two separate turns on different topics from the same person.

Explicit markers of topic change, for example, *by the way*, are common in SCMC discourse:

(6.3)

SusanneN says, "By the way, weather reposts are a great way to
kane students get intrested in telling abnout their own region,
and knowing about others."

(6.4)

JohnSte asks, "By the way, can you get into prohosting?"

The phrase *by the way* appears 52 times in the corpus of 150 logs (roughly 750 000 words) of *Webheads* SCMC discourse. When abbreviated, in SCMC style, to *btw*, it appears 91 times thus:

(6.5)

Vance: btw, watch the windows and doors. Some of them take you
to other rooms

In SCMC discourse, both *oh* and *btw* can be considered markers of topic shift in a comparable way to their spoken equivalents. This observation tallies with comments about 'think-writing' in the computer medium (Pennington, 2001:16). Pennington posited that writing in the computer medium, specifically word processing, can become interiorised to the extent to which it becomes unconscious ('think-writing'). This process of interiorisation, we suggest now, is expedited when the writing is part of a real-time

written conversation. The prevalence of discourse markers such as the topic change markers *oh* and *by the way/btw* in SCMC discourse points to similarity in processing and production between conversations in the spoken and the written mode.

But topic boundary markers of all kinds are often lacking in SCMC discourse, leading to abrupt topic shift. It may be that abrupt topic shift is a marker of group membership. The use of abbreviations and other shortenings in CMC discourse is not done simply to make interaction speedier (the ‘save a keystroke’ interpretation: Crystal, 2001:80). Rather, they are used to demonstrate membership of the group. Although perhaps born out of a need to speed up the discourse, they achieve status as features used by members of a particular group of intimates. Furthermore, some abbreviations used as group membership markers actually take longer to produce than the full version of the word. Winter (2002) for example, notes in her study that to produce the @ symbol in a mobile phone text message takes 17 keystrokes, while to write ‘at’ takes just two. By analogy, it may also be the case that participants in the Webheads synchronous CMC discourse neglect the topic boundary markers of spoken discourse not only simply because it is expeditious to do so (even typing *oh* or *btw* takes time), but also as a marker of group membership, or norm of interaction within the community (*viz.* Hymes, 1972b).

Tannen (1984:30) proposes abrupt topic shift as one of four topic-related features of a *high involvement style* in spoken conversation. Abrupt topic shift is also included as an *in-group marker* or *marker of intimacy* in the study by Cutting (2000:27). In this example we witness two abrupt topic shifts, one initiated by Vance (turn 24), and one by Ying-Lan (turn 26):

(6.6)

- 23 Vance: The most successful person in life is the one who stays a child the longest.
- 24 Vance: I can't seem to get text to go around a picture in a column.
- 25 Vance: There should be a way to do it.
- 26 Ying-Lan: ^Do you use "Front page" to edit your home page?
- 27 Vance: I have used it, but I didn't like it. I have a copy, but now I don't use it.

Of note is the lack of discourse markers. In the view which proposes abrupt topic shifts as markers of intimacy, the shifts in the extracts above signal the participants' involvement or rapport with one another.

Two possible, but competing interpretations emerge from this view. On one hand the medium itself could be said to propel participants towards intimacy. This reading would have it that the pressure to 'get the message out' as efficiently as possible (to keep pace with the unfolding text) obliges participants to omit topic boundary markers. Which is to say that intimacy is engendered by the characteristics of the medium when participants find themselves using discourse patterns which they might associate with intimate verbal behaviour in spoken discourse.

On the other hand participants in the discourse could be said to have a general knowledge of the conventions of SCMC discourse and are alert to the differences between SCMC and spoken conversational discourse types. Consequently, what we witness when we assume we are observing close in-group behaviour associated with high involvement style is in fact a mere impression of intimacy.

An examination of a short stretch of IRC chat room discourse (MSN chat: *Up to the minute news*) will help show whether this is an accurate view, and which of the two conclusions is most viable:

(6.7)

The chat's topic is: Talk about up-to-the-minute news

HRH_SeaWitch : what about people who have bbq's lucy?
eily : what gasoline sales ...petrol blockade has started again here
HRH_SeaWitch : they're forever blowing up whole blocks in the summertime
HRH_SeaWitch : or what about cars?????
‣ Guest_Aly has joined the conversation.
JunoMoneta : **hehe, nah full service petrol stations**
offspring : blockade?
eily : do you like brisbane jun0, i do but it's quiet tho!
Guest_Aly : INSOMNIACS
JunoMoneta : **I like it, it's not quiet to me, my home town is only 100,000 people**
Guest_cheater : fat women never cheat! they service you over and over wait! that is cheating
eily : we don't have full service petrol stations haven't for years...we pump our own!!
JunoMoneta : **yeah, same here**
offspring : I'm not an insomniac,,, I just can't sleep right now...

The first of the posited readings above may be true for IRC chat rooms. That is to say, in the above extract, both the discourse patterns in terms of abrupt topic shift and the content are characteristic of a high involvement style. The second interpretation would only hold if the content of the discourse were focused on information. Examples of IRC chat room discourse such as the one above demonstrate that the content of the discourse is largely related to interpersonal involvement. The topic of the chat is of some

significance when juxtaposed with the content of the turns: even when the purported topic of the chat room is information-oriented, on the whole the conversation is to do with interpersonal relations. The dominant language function is phatic, rather than referential (Malinowski, 1923; Jakobson, 1960).

The notion that the exigencies of the medium oblige participants to perform abrupt topic shifts, and thus to adopt positions of intimacy may, however, be seen as overly deterministic. In the *Webheads* text there are features which lead us away from an explanation of abrupt topic shift based on a striving for speed. Both Vance and Ying-Lan (a learner of English) produce turns in example 6.6 above which are impeccably spelled, punctuated and capitalised, a feature of *Webheads* discourse which we comment upon further in Chapter 8. We can conclude that both were taking care when composing their turns. Furthermore, we can relate this argument to a broader question. If the only reason for omitting the markers of topic shift typical of spoken discourse was to save time, we must ask, to save time for what? In multi-party IRC discourse (example 6.7), where text in a crowded chat room scrolls up the screen at some speed, there might be an imperative to post turns as quickly as possible. But the extracts from the *Webheads* discourse, involving Vance and Ying-Lan, are two-party conversation, albeit written conversation, and it might be assumed that there was little urgency to post the turns.

Topic drift

On other occasions the new topic emerges from a related topic. In this extract there is both overlap and a gradual emergence of the new, but related, topic:

(6.8)

turn	topic	participant/text
96	a	Vance: If you order it, when it asks "Which country are you visiting from?" be sure and select USA.
97	a	Ying-Lan: ^I don't think it is helpful.
98	a	Vance: For Germany it's 259 DM.
99	b	Maggi: I am still a little nervous ordering online except from Amazon.com
100	a	Vance: How much is that in dollars?
101	a	Ying-Lan: ^They will collect GBP99 from my credit account.
102	b	Vance: I've had good luck so far with online ordering.
103	a	Maggi: too much...I'll wait for the Euro...:-)
104	b	Ying-Lan: ^me too.
105	b	Vance: We have to do it because we can't get a lot of things here otherwise.
106	a	Ying-Lan: ^To do what?
107	b	Maggi: true...handy then isn't it Vance?

Topic shifts such as the one above from what is here labelled topic *a* to topic *b* raise a number of questions. Firstly we need to reconsider whether an element of interactivity is necessary to define a topic. If there had been no development of topic *b* in turns 102, 104, 105 and 107, then it is likely that turn 99, the first turn of topic *b*, would have been considered part of topic *a* in later analysis.

Secondly, we could regard topic *b* as in some way a sub-topic of topic *a*, as the lexical chains of reference are apparent in both *b* and *a*. ‘Order’ occurs in topic *a*, turn 96; ‘ordering’ appears in topic *b*, turns 99 and 102. But as Cutting (2000:27) says, lexical links can exist between topics.

Finally, the extract above, and the problems associated with definitions of topic within it, also raise the question of the extent to which it is feasible and useful to attempt to define topics and delineate them across precisely identified semantic boundaries. In the discourse of synchronous CMC, participants themselves display a marked tolerance of ambiguity. This is displayed in the acceptance of the lack of sequential cohesion manifested by disrupted turn adjacency discussed in Chapter 5, section 5.4.

6.2.3 Recurring topic

In SCMC discourse, topics also recur abruptly. In spoken discourse, this recurrence has been characterised as *renewal* (Crow, 1983) and *return to interrupted context space* (Reichman, 1985; 1990) In the next extract, we focus on a topic we may label *how to build a website using Geocities*, showing how it recurs or re-emerges at points throughout the text:

(6.9)

turn	participant/text
46	Vance: As long as you're browsing, why not go to geocities.com and start a web site?
47	Vance: http://www.geocities.com/
[...]	(11 turns)
59	Vance: Would you like to visit the Geocities site while I'm here? I could help you set up a web page.
[...]	(1 turn)
61	Ying-Lan: ^now?
62	Vance: Yeah, why not?
63	Ying-Lan: right
[...]	(2 turns)
66	Vance: Hey Maggi. I've just invited YL to browse over to Geocities and set up a web site.
[...]	(1 turn)
68	Maggi: Ok...go ahead...oh that was fabulous!!!!!!!
[...]	(13 turns)
82	Ying-Lan: ^I don't know where is the gate of

geocities.com?s'

[...] (1 turn)

84 Vance: <http://www.geocities.com>

[...] (23 turns)

108 Vance: Anyway I'm just visiting geocities.com ... are you there?

109 Maggi: I am...

[...] (2 turns)

112 Ying-Lan: ^Who is the owner of Geocities?

113 Ying-Lan: owner

[...] (14 turns)

128 Vance: btw, I'm at <http://www.geocities.com/join> - That's the starting point

[...] (4 turns)

133 Maggi: ok...I am at join...

134 Ying-Lan: ^Where is join?

135 Vance: <http://www.geocities.com/join/>

136 Maggi: geocities.com/join

137 Vance: Do you want to do this too, Maggi?

138 Ying-Lan: ^I am at geocities.com/join/

139 Maggi: this looks really interesting...

140 Vance: OK. Choose Free Home page program

141 Maggi: ok

142 Vance: Maybe I'll start a new one while I'm at it.

143 Ying-Lan: ^One more question, Is it necessary to accept the cookies?

144 Vance: Now we've got to fill out the form

145 Maggi: If I do this I will have a new home, won't I?

146 Vance: You can try to decline the cookies and only except them if you have to.

147 Ying-Lan: rejct?

[...] (continues...)

In some cases (for example between turns 59 and 61; between turns 82 and 84) the gaps result from disrupted turn adjacency. In other cases, participants clearly visit different topics before returning to the topic. For example, between turns 84 and 108 there is a lull of 23 turns, during which topic labelled *the advantages of various web-page editors* and the topic *the advantages and pitfalls of online shopping* carry on.

If we examine the communicative action as well as the content of topics (see section 6.3), we might gain an insight into why they recur as they do. The recurring topic in example 6.9 above is *how* to do something. We can gather from the dialogue that as well as participating in the verbal discourse, Vance, Maggi and Ying-Lan are carrying out another activity (see, for example, turns 108-9). That is to say, they are multitasking. At certain points in the discourse something happens in another space on the internet which is relevant to the recurring topic, which then over-rides the other topics and to which they return. We return to this point when discussing verbal activity and conversational floor below. We also note that topic recurrence is also associated with ability to scroll up and

down the cache of previously sent text to re-read turns. The implications of this ability for *narration* were explored in Chapter 4, section 4.3.

In the following paragraphs we investigate sub-topic drift, with reference to surface cohesion, broad topic framework, and ‘speaker’s topic’. The intention is to achieve a greater awareness of how participants themselves perceive topic.

6.2.4 Topic framework, sub-topic drift and speaker’s topic

Gross characterisation of topic is mostly well served by semantic labelling, or ‘what they are talking about’. However, within some topics there is digression to the extent that early turns bear little relation to later ones. We take the following stretch of text:

(6.10)

- 7 Ying-Lan: ^Did you enjoy Christmas in UAE?
- 8 Vance: I'm trying it now.
- 9 Vance: Yes. My eldest son is visiting from California.
- 10 Vance: What about you?
- 11 Ying-Lan: ^You must had a good Christmas.
- 12 Vance: You must have had ...
- 13 Vance: (grammar)
- 14 Ying-Lan: ^Family is very import for live.
- 15 Ying-Lan: ^You must have had a good Christmas.
- 16 Vance: Yes, we try to get together at Christmas. My son is only 20. Still a baby.
- 17 Ying-Lan: ^Vance, he only is 20 years old.
- 18 Ying-Lan: ^He is very young.
- 19 Vance: My other son is 13.
- 20 Ying-Lan: ^I am 35 years old. Sometimes, I like a child.
- 21 Ying-Lan: ^I am easy to be angry.
- 22 Ying-Lan: ^Just being myself.
- 23 Vance: The most successful person in life is the one who stays a child the longest.

Turn 8 can be disregarded: it is a turn from a previous exchange whose appearance here is due to disrupted turn adjacency (see Chapter 5, section 5.4). The other turns relate to one another in some sense, and might be considered a topic. Within the topic, however, there can be seen a gentle drift from one sub-topic to another. ‘What they are writing about’ includes *Christmas, family, age*. Later turns bear little relation to earlier ones.

This digression, or drift can also be investigated with reference to a surface cohesion description of topic, as we do below, concentrating on the recurrence of lexical items and their pronominal referents. From the beginning to the end of the stretch of text the drift can be partially tracked by following the lexical and referential relations between and within sub-topics:

(6.11)

turn	participant/text	sub-topic, with lexical/referential relations: (i) (ii) (iii)		
7	Ying-Lan: ^Did you enjoy Christmas in UAE?	Christmas		
9	Vance: Yes. My eldest son is visiting from California.		son	
10	Vance: What about you?			
11	Ying-Lan: ^You must had a good Christmas.	Christmas		
12	Vance: You must have had ...			
13	Vance: (grammar)			
14	Ying-Lan: ^Family is very import for live.			
15	Ying-Lan: ^You must have had a good Christmas.	Christmas		
16	Vance: Yes, we try to get together at Christmas. My son is only 20. Still a baby.	Christmas	son	only 20
17	Ying-Lan: ^Vance, he only is 20 years old.		he	only 20
18	Ying-Lan: ^He is very young.		he	young
19	Vance: My other son is 13.		son	13
20	Ying-Lan: ^I am 35 years old. Sometimes, I like a child.			35 years old
21	Ying-Lan: ^I am easy to be angry.			
22	Ying-Lan: ^Just being myself.			
23	Vance: The most successful person in life is the one who stays a child the longest.			child

We can track sub-topic (i) by following the noun Christmas. Sub-topic (ii) is identified by the noun *son* and the pronoun, *he*. In sub-topic (iii) we expand the range of referents to include all mentions of age.

There are three loose sub-topics, with a lexical/referential overlap: Christmas, Vance's sons, and age (youth). Turn 16 is pivotal, mentioning all three elements of the sub-topics; and turn 23 works well as a summariser, effectively closing the topic. There are two complications. Firstly, we can note that though the content of turn 15 is on 'Christmas' it seems to be a correction of grammar, prompted by Vance's turns 12 and 13. Thus it is an incidental focus on form (Long, 1991; Sheen, 2002). Can these turns really be said to be the same topic? Secondly, Ying-Lan's turns 14, 21 and 22 have no lexical or pronominal relation to the proposed sub-topics. The notions of topic framework and speaker's topic may elucidate in such ambiguous matters of sub-topic drift.

Brown and Yule (1983) propose a *topic framework* within which the topical conversation takes place. The topic framework is constituted by *activated features of context* (1983:75), that is, features of context deemed to be relevant in the interpretation of particular stretches of discourse, and are directly reflected in the text. In Brown and Yule's terms, the above fragment of discourse could be considered as having taken place within a topic framework which includes elements which are independent of topic *per se* but which are important for its interpretation. In the stretch of text under discussion, and following Brown and Yule (1983:78), a partial representation of the topic framework, including role relations of the participants, might be:

Conversation between Vance (English language teacher and founder-tutor of *Webheads*, American) and Ying-Lan (English language learner and student with *Webheads*, Taiwanese), no other current participants.

Interpretation of turns 12, 13 and 15 is possible when these elements of topic framework are taken into account.

In addition, Brown and Yule explain that within the topic framework there are elements of personal *speaker's topics*. By considering speaker's topic, they recognise that within a particular conversational topic framework, where the general topic may be agreed, the individual participants sometimes have differing views on what the topic is or where the focus should be. When investigating speaker's topic, text of discourse is analysed, '... not in terms of how we would characterise the participants' shared information, but in terms of a process in which each participant expresses a personal topic within the general topic framework as a whole' (1983:88). Thus Ying-Lan's turns 14, 21 and 22 do not fit into the sub-topical categorisation by noun and pronoun, but they may help point towards the underlying speaker's topic. Within the overall framework, Ying-Lan's topics are family, age and herself, while Vance's speaker's topic is his sons.

The notion of speaker's topic is helpful in that it enables us to see the discourse from the point of view of an individual participant. In this respect, we gain a certain sense of what is relevant for that individual participant. It also emphasises the nebulous and individual nature of topic within a broader framework.

In the following section of this chapter we extend this integration of contextual features in the consideration of topic in SCMC discourse by examining a different type of framework: the conversational floor. When studying patterns of conversational floor, topic is included as just one contextual feature of the unfolding discourse which contributes to the emerging overall shape.

6.3 Conversational floor in SCMC discourse

A treatment of the notion of floor in synchronous CMC is found in Cherny (1999). She states (1999:174):

Given that there is no competition for the [MOO] channel per se, but rather competition for attention or control of the discourse, notions of shared or collaborative floor seem to be more helpful than the standard turn-taking literature. These notions also appear more useful for theorising multi-threaded topic discourse.

Cherny has found that work on floors of conversation in multi-party spoken discourse was helpful in developing her categorisation of floor types in a MOO. And on the face of it, multi-party SCMC discourse bears more similarity to the fluid threads of dinner party conversation or discussion groups than to the two-party conversation which is the foundation of much spoken conversation analysis.

In her review of early conversation analysis work on turn taking and floor of conversation, Edelsky (1981) reveals that frequently no distinction was made between floor and turn, though in any multi-party discourse such a distinction is vital. Stenstrom's (1994:34) definition of the turn as: '... everything A says before B takes over, and vice versa' is crude but entirely workable in SCMC, a discourse environment where turns cannot be co-constructed and where there is no overlap. It is a technical definition with little ambiguity. Definition of the floor is less clear-cut, dependent as it is upon inferring how participants themselves viewed the unfolding discourse. For such a definition, we first turn to Edelsky (1981:405):

The floor is defined as the acknowledged what's-going-on within a psychological time/space. What's going on can be the development of a topic or a function (teasing, soliciting a response, etc.) or an interaction of the two. It can be developed or controlled by one person at a time or by several simultaneously or in quick succession. It is official or acknowledged in that, if questioned, participants could describe what's going on as "he's talking about grades" or "she's making a suggestion" or "we're all answering her."

It is questionable that participants in discourse would actually describe 'what's going on' in terms such as those suggested. Nevertheless, Edelsky's discussion of floor usefully draws in key contextual elements.

A reading of Edelsky suggests that there are three definable elements to the floor: (1) the topic, the *aboutness* of the discourse; (2) the *communicative action*: how things are being said in the discourse; and (3) the *participants' sense* of what is happening in the conversation. From the analyst's point of view, these are each evident only to the extent to which they can be inferred from the text. This constraint should be acknowledged as a caveat in a discussion of floor as it is in discussion of topic. Nonetheless, the text of SCMC allows

an analyst to gain a closer participant's sense of what was going on than, for example, a transcription of spoken discourse. This is because the participants themselves are denied the range of visual and aural feedback cues; any ratification must *ipso facto* appear in the text itself, as we see below.

6.3.1 Floor ratification in SCMC

'Simply talking, in itself, does not constitute having the floor,' say Shultz, Florio and Erikson (1982:95). 'The "floor" is interactionally produced, in that speakers and hearers must work together at maintaining it.' Thus one can be the speaker but not hold the floor. In her study of floor and gender patterns in asynchronous CMC discourse, Herring (forthcoming) supports Edelsky's assertion that to be a floor-holding turn, it must be ratified by other participants. In spoken discourse, such ratification can be done verbally or through non-verbal nods and backchannels. In the examples below, we see that in SCMC floor ratification can also be done verbally or through responses which are representations of non-verbal behaviour.

In example 6.12 Vance (turns 1, 2 and 4) is holding the floor; ratification is done by BJB (turn 3) and SusanneN (turn 5) through their verbal responses.

(6.12)

- 1 VanceS says, "I go to Guangchow and get Maggie (she needs a travel partner to travel in the summer)"
- 2 VanceS says, "Then we go visit Moral in Kunming"
- 3 BJB exclaims, "sounds like fun, Vance!"
- 4 VanceS says, "Then to Wuhan ot visit Lian (2000 km)"
- 5 SusanneN says, "Oh really, sounds exciting."

In example 6.13 BJB ratifies Susanne's turn with a 'nod'. This is an *emote*, a turn sent in the third person and has an equivalent in non-verbal behaviour in face-to-face discourse (see Chapter 4, section 4.3):

(6.13)

- 1 SusanneN asks, "Really, Minsk is closer to us in Europe than Pennsylvania, I guess?"
- 2 BJB [HelpDesk] nods

Floor ratification by members of the *Webheads* group has the dual purpose of signalling both that the participant is paying attention to the floor holder and that they comprehend what has been written. In her investigation into backchannel responses in a

MOO, Cherny (1999:194) similarly maintains that: ‘... it is difficult if not impossible to separate affect out from the back channel function in this medium, since an appropriate emotional response to a turn (e.g., a laugh) indicates both attention and understanding just as well as a nod does.’

In multi-party SCMC discourse, problems arise with floor ratification being misdirected or mistaken. In example 6.14 below, Maggi’s response (turn 4) to Gold10’s turn (1) is misinterpreted by Ying in turn 5 as a ratification of her turns 2 and 3:

(6.14)

- 1 gold10: Is here a lesson about reading or writing?
- 2 Ying-Lan: They were worry about the world,,, we will be worry about the computer.
- 3 Ying-Lan: ^not will be... we are worry about the computer.
- 4 Maggi: which do you prefer?
- 5 Ying-Lan: prefer what?
- 6 Maggi: no, we are worrying about the computer
- 7 gold10: what will be taught at section 7?
- 8 Maggi: I meant Gold Ying...

Turns are directed in SCMC by naming the participant to which they are addressed. This cohesive device of *cross-turn reference* (Herring, 1999) or *addressivity* (Werry, 1996) is used by Maggi in turn 8 of example 6.14 to repair the misunderstanding above (in Chapter 5, section 5.2.6, the issue of cohesive devices characteristic of SCMC is discussed). In other cases, as with example 6.15 below, addressivity is included in the original floor-holding and floor-ratifying turns (turns 1 and 4). This can be considered a navigation technique in response to the fact that there are a number of participants.

(6.15)

- 1 SusanneN [to Maggie]: "A webhead, has a lot of furry hair, and a fuzzy old jacket, thick glasses and is all pale because of the lack of daylight, plus pimples due to unhealthy snacks and black coffeee?"
- 2 PhilB says, "Margaret - that's right! Jacket & tie become mandatory pedagogical accessories."
- 3 JohnSte says, "Back when I was a Department chair, my dress code was shorts and a tee-shirt."
- 4 MargaretD exclaims, "ROTFL at Susanne description!"

Ratification is carried out by a representation of non-verbal behaviour: *ROTFL* is SCMC shorthand for ‘rolling on the floor laughing’ (see Chapter 4, section 4.3).

6.3.2 Participant structure and floor types

Research into conversational floors in CMC discourse has quite naturally concentrated on applying and testing findings from analysis of multi-party spoken conversation. Edelsky's (1981) research into floors and gender in spoken conversation identified two types of floor: a singly developed floor (F1) and one which is a 'collaborative venture' (F2). F1's are: '... characterised by monologues, single-party control and hierarchical interaction where turn takers stand out from non-turn takers and floors are won or lost ...' (Edelsky, 1981:416). F2's are: '... inherently more informal, cooperative ventures ...' (*ibid.*). Herring (forthcoming) found that these two floor types were evident in her study of asynchronous CMC discourse on two discussion boards.

Missing from Edelsky's bipartite distinction are instances where two or more floors of conversation are continuing in parallel. A broader classification deriving from research into dinner table conversation and classroom discourse by Shultz *et al.* (1982) (also in Erikson and Shultz, 1977) posits categories of participation structure where floors are single or multiple. Though there are further sub-divisions in this classification, single floors are, broadly speaking, correspondent with Edelsky's F1 and F2: a single speaker, with a number of attenders; or a floor which is more collective or collaborative. Multiple floors, type IV participation structure in the typology of Shultz *et al.*, are described by these authors (1982:102) as having: '... subgroups of the persons present participating in topically distinct simultaneous conversations.'

The summary grouping of floor types by Hayashi (1991) draws on the findings of Shultz *et al.* and Edelsky. Hayashi also divides floor types into single conversational floors and multiple conversational floors, and also subdivides the single floor type into the single person floor and the collaborative floor. Further sub-categorisations are described, based on relative levels of interaction. Hayashi's system is adapted by Cherny (1999:176ff) to describe floor types in MOO discourse. Within the context of the *Webheads* SCMC described here, identification of these floors is straightforward enough, suggesting a similarity of patterns of floor structure across contexts of synchronous CMC use.

6.3.3 Floor patterns in SCMC

Three habitually occurring floor types are described and illustrated below: the speaker-and-supporter floor; the collaborative floor; and the multiple conversational floor.

Speaker-and-supporter floor

The speaker-and-supporter floor is a single conversational floor. One participant can be regarded as the floor holder, and others are supporting through the use of back-channel devices and other short interjections. In this example (6.16), Vance is holding the floor; his short turns are interspersed by the occasional supporting comment, question and back-channel from Maggi and Ying-Lan:

(6.16)

- 1 Vance: Go to this url:
http://www.geocities.com/members/tools/file_manager.html
- 2 Vance: You might want to bookmark that url.
- 3 Vance: You can't use it just yet.
- 4 Vance: But you'll want to come here later:
http://www.geocities.com/members/tools/file_manager.html
- 5 Ying-Lan: ^why?
- 6 Vance: Geocities will now email you a password.
- 7 Maggi: Hey, I'm getting the hang of this.
- 8 Ying-Lan: ^I got it.
- 9 Maggi: great...
- 10 Vance: You got the password?
- 11 Ying-Lan: ^yes
- 12 Ying-Lan: ^I am a member of geocities.com now
- 13 Vance: Great. OK, you can enter the file manager.
- 14 Ying-Lan: ^My email address is yinglan@geocities.com
- 15 Vance: Go to that url and press the Enter the File Manager button.
- 16 Vance: You will be asked for your user name and password.
- 17 Vance: Your user name is yinglan and your password is whatever they sent you.
- 18 Maggi: sorry, I accidentally clicked on the films...
- 19 Vance: Here's what you have to do next:
- 20 Vance: When you visit your new url, you will see the file index.html by default.
- 21 Maggi: ok
- 22 Vance: Geocities created an index.html file for you. If you put in your url you'll see it.
- 23 Maggi: ok
- 24 Vance: What you want to do now is replace that file with your own, which has to be called index.html
- 25 Maggi: ok
- 26 Vance: So you create a little web site. The introductory page to your site is called index.html. And you just upload the files to your server space using the file manager.
- 27 Maggi: neat!!!!llllt
- 28 Vance: I make my web sites in ms Word. I just start a document, save it as html, and link it to other documents.
- 29 Maggi: a whole lot easier than I thought!!!!!!!!!!!!

Collaborative floor

The single collaborative floor is constructed by a number of participants. In this example (6.17) Ying-Lan, Vance and Maggi co-construct the collaborative floor:

(6.17)

1 Ying-Lan: How long will you take your vacation?
2 Ying-Lan: Sounds nice.
3 Vance: I will take 6 days for my vacation.
4 Vance: But it's not a vacation, really.
5 Ying-Lan: You will go alone?
6 Vance: I will be in Europe alone but my son will fly to
New York and camp out
7 in my hotel room.
8 Ying-Lan: You son who lives in California?
9 Vance: Yes, he's never been to New York City before.
10 Maggi: Be sure the mini bar is stocked with snacks...
11 Vance: No way, I'll stock up at the deli.
12 Vance: He's been trained to stay out of mini bars in
upscale hotels.
13 Maggi: That's a good place to start...
14 Vance: The mini bar?
15 Maggi: no...the deli's
16 Ying-Lan: ^New York is a big city ... why do you call her
as "Big Apple"?
17 Maggi: ...best in the world
18 Vance: Good question!
19 Maggi: Has to do with jazz Ying...
20 Maggi: or at least one story does...
21 Vance: Does it?
22 Ying-Lan: Has to do with Jazz?
23 Ying-Lan: one story?
24 Maggi: Yes...remember I was born in New York...

In this example, the topic drifts from Vance's vacation, to the hotel in New York, to the origin of the nickname for New York. Throughout, however, the three interlocutors are all participating more or less equally, and the activity can be best described as *chatting* (rather than *instructing* or *describing*, for example). As we explore further in 6.3.4 below, topic alone is thus not an adequate basis for floor description.

Multiple conversational floor

When two or more floors exist in parallel, a multiple conversational floor is evident. In the following stretch of twelve turns (example 6.18), the floors have been identified and labelled by their primary feature, topic. Five turns are associated with the topic of thanksgiving (floor A), while seven relate to discussion of the TOEFL test (floor B):

(6.18)

1 A Ying [guest] says, "Hi.. everyone.. it is a little
late to say "Happy Thanksgiving!" "
2 A sara [guest] says, "hi ying"
3 B SusanneN [to Sara [guest]]: "the TOEFL Exam tomorrow,
how can we help you prepare for that?"
4 A Ying [guest] asks, "How was your turkey at the table?"
5 B sara [guest] says, "i have one practice i will do it

- later"
- 6 B Ying [guest] asks, "Toefl Exam?"
- 7 B sara [guest] says, "yes"
- 8 A SusanneN asks, "And vance, how was the turkey outing with your Spanish friends?"
- 9 B SusanneN says, "it is the Test Of Englsih as a Foreign Language"
- 10 B Ying [guest] says, "I knew that."
- 11 A BJB [to Ying [guest]]: "it is never to late to say happy Thanksgiving...we all have so much to be thankful for!"
- 12 B SusanneN [helpdesk] smiles to Ying I just learnt a new acronym.

Within a multiple conversational floor, as Cherny (1999:176) notes, there can be a main floor and side floors, or there can be two or more main floors running in parallel. In SCMC discourse it is possible for an individual participant to be involved in more than one floor of conversation. In the above example of a multiple conversational floor, three of the four participants contribute to both floors. This tendency of the proficient SCMC participant to switch between floors is an instance of multitasking, as discussed in Chapter 3, section 3.3.1, and can be considered an element of electronic communicative competence (Chapter 3, section 3.4). Multitasking has been considered between different on-screen activities (R. Jones, 2002) and between on- and off-screen activities (Scollon, 1998; Scollon *et al.*, 1999). Evidently, it can be within one space on-screen, as with the participants in example 6.18, who move between floors with no obvious difficulty.

It may be noted that in example 6.16 above (the speaker-and-supporter floor), one participant was explaining to others how to do something – in this case, how to build a website. This is in contrast to the pattern in example 6.17 (the collaborative floor). Here, the participants were said to be chatting, which is, after all, the prototypical activity in a chat room. In the following section, we propose that floor development is shaped not only by the topic of the conversation, but also by its communicative purpose, by the relationships of the participants and by the computer-mediated nature of the discourse.

6.3.4 Accounting for floor development

Many factors may influence the development of particular floor types. Here we outline three contextual aspects of the discourse which shape floor development: participants and their roles within the group; verbal activity (topic taken together with communicative action); and a selection of medium-related features. In the next section (6.3.5), the effects of these are then investigated with reference to examples of the floor types outlined in 6.3.3 above as they occur within a single stretch of SCMC discourse text.

Participant roles

In the discussion of topic framework in section one of this chapter, we noted that participant roles within the discourse are relevant, or *activated*, features of context (after Brown and Yule, 1983:75). Here we maintain that such roles are relevant to the extent to which certain floor types may be associated with certain roles.

Both Edelsky (1981) and Herring (forthcoming) concentrate on gender as key contextual aspects of floor development. Edelsky is careful to note that the F1 and F2 floor types are gender-independent, though participation by men in F1 floors was far greater than participation by women (1981:415). Herring concludes that her findings are of two gender styles rather than two different floor types: a male style associated with individual power and a female style associated with accommodation to others (forthcoming:18). In the discourse of the virtual community in question here, *Webheads*, the status of the participants and their various role relations may be more influential than gender in shaping floor structure. A primary though troublesome distinction is between expert user teachers of English on one hand, and learners of English on the other. The term *expert user* is used in preference to the term *native speaker* for the obvious reason that expert users of a language are not necessarily native speakers. For discussion of this and other issues surrounding the notion of the 'native speaker' see Rampton (1990). Though there are students and tutors in the *Webheads* group, care is taken to minimise any perceived divide. What is more, the role of participant as learner, as tutor, or as other interested party (e.g., MOO help-desk volunteer; researcher) is not always clear, as we find in Chapter 8. There, the point is made that *Webheads* 'learners' are sometimes English language teachers in off-screen life. Another distinction may be made between the more and the less technologically able, or *electronically literate* members of the group, regardless of their level of English. Proficiency in English does not automatically confer proficiency in the use of the technologies of CMC, as any first-time visitor to an internet chat room will testify. Thus a participant with a greater technological competence may find him or herself cast in the role of tutor, but tutor in the use of the technologies of electronic literacy.

There is a growing body of research on role relations in virtual communities. Discussion of these and other issues pertaining to online identity can be found in Chapter 4. See, for example, Cherny (1999) on life in a MUD community; Turkle (1995) on roles and identity on-screen, and Smith and Kollock's (1999) collection of papers on online communities. On the subject of the roles of teachers and students face-to-face and

online see in particular Salmon (2000); Kern (1995b); Warschauer (1996; 1999a; 1999b). We discuss these matters further in Chapters 7 and 8.

Verbal activity and topic

The research of Shultz *et al.* (1982) shows that floor patterns are associated with the speech activity, and that changes in floor patterns occurred when the speech activity changed. ‘Speech activities’, say Shultz *et al.* (1982:96), are: ‘units of discourse in conversation that are longer than a sentence and may consist of one discourse topic, or may consist of a set of connected topics and subtopics.’ The term *speech activity* is from Gumperz (1977) and is a synthesis of the current communicative action and the broad topic of the conversation, for example, ‘discussing politics’; ‘chatting about the weather’ (Gumperz, 1977:206). The communicative action is the name given to the type of conversation which might be happening at any time, for example chatting, explaining, discussing, or arguing.

Shultz *et al.*, when making the important link between conversational floor patterns and speech activity, found that certain types of speech activity often corresponded with certain types of floor. That is to say, when the speech activity was ‘chatting about how much everything costs in the stores nowadays’, the appropriate floor was a multiple conversational floor with overlapping speech. And when the speech activity was ‘explaining why and where the father...is going out of town...’ there is only one floor, where the parents are the primary speakers (Shultz *et al.*, 1982:97). Because SCMC is written rather than spoken, the term *verbal activity* is used here in preference to speech activity.

The floor, then, is not defined by topic, or *aboutness*, alone. This is partly, but not entirely, because topics and their boundaries themselves are such difficult things to identify. As we found in 6.2.2, topics frequently drift; that is, they move gradually from one area into others, without an easily discernible topic boundary. Sub-topics, somehow associated with an underlying main topic, emerge and fade. Furthermore, individual participants may be pursuing their own *speaker’s topic* within the overall topic framework.

The broad topic itself as it relates to focus of attention is a concern here. In the *Webheads* SCMC sessions, it is common for a learner to explicitly raise a language learning point. When the topic of the discourse is so obviously related to the acquisition of the target language (English), it is expected that attention would be focused towards that floor of conversation. It is also common for a participant (and we note again that the roles of

tutor and learner are flexible) to discuss an aspect of the technologies of SCMC. Particular floor patterns are associated with topics relating to the development of second or foreign language skills and with topics relating to the development of electronic literacy skills. This is demonstrated and explained in the analysis and discussion in 6.3.5 below.

Medium-related factors

There are also medium-related reasons for particular floors to develop in SCMC. In particular, the emergence of the multiple conversational floor may be associated with the way in which a written conversation occurs. Cherny (1999:180) maintains that: 'Multiple participant floors are in fact easier to achieve [in SCMC discourse] than they are in face-to-face conversations.' She claims this is due to the lack of overlap (*i.e.* the inability to co-construct turns) in the medium. We might also mention that the ability to scroll up and re-read previously posted turns, coupled with the slower speed of the unfolding discourse compared to spoken conversation, facilitate the emergence of multiple floors, and enable an individual to participate in a number of floors simultaneously.

Topics in SCMC are also prone to recur, as noted in section 6.2.3. This leads to the re-emergence of particular floor types. This is the case when participants are carrying out more than one on-screen activity. That is to say, when they are multitasking. At certain points in the discourse something happens in another space on the internet which is relevant to a previous topic which then over-rides the current topics. The floor type may consequently revert to a previous one.

6.3.5 Analysis and discussion: Floor development

This discussion is based on a stretch of SCMC discourse text of 36 turns in length, presented below as example 6.19:

(6.19)

- 1 VanceS says, "I never knew what chili was exactly before"
- 2 BJB . o O (that will open a web window to go with your
text client)
- 3 LianA says, "come to china, then you will know what it
is, vance."
- 4 BJB . o O (I hope)
- 5 LianA oO
- 6 PhilB says, "Vance, there's a lot of confusion between
the words "chili" and "chile" (borrowed from Spanish."
- 7 Sue [guest] asks, "Lian, how much did you take on GRE?"
- 8 LianA asks, "what does burn the scandle from the two ends
mean? who can help?"

9 LianA says, "not very high, only 2160"
 10 BJB [to Lian]: "how long do you think a candle will last
 if you burn both ends?"
 11 LianA says, "nol not candle but scandle"
 12 LianA says, "no---typo"
 13 Sue [guest] says, "so hight? i am wondering i can only
 take 1500"
 14 PhilB says, "Lian, it's a play on words."
 15 VanceS says, "I've been to China several times, but never
 to Wuhan"
 16 LianA says, "it said if you burn the scandle from 2 ends,
 you will be a busy man."
 17 BJB thinks there are several threads to this conversation
 18 VanceS says, "Also you will burn yourself out"
 19 LianA says, "welcome vance to wuhan next time to china."
 20 PhilB says, "Normally to "burn the candle on both ends"
 means to work so much you tire yourself out. With
 "scandal" instead of "candle" it sounds like Bill Clinton
 with his hot interns. <g>"
 21 BJB chuckles. Same result, though.
 22 VanceS . o O (this is a normal consequence of
 multitasking)
 23 VanceS says, "he must have had too many hot interns in
 the fire"
 24 LianA giggles
 25 PhilB asks, "Hey, I found a new free resource called
 "stuffincommon virtual communities". Anyone heard of it?"
 26 VanceS says, "never"
 27 Sue [guest] says, "no"
 28 LianA says, "no"
 29 PhilB asks, "Wanna see?"
 30 VanceS says, "sure"
 31 Sue [guest] says, "sure"
 32 PhilB says, "It has chat, tools, and a neat whiteboard."
 33 LianA says, "yes."
 34 PhilB asks, "I'm going to project. Sue, Lian, do you know
 about projections?"
 35 LianA says, "yes"
 36 Sue [guest] says, "not sure"

There are three distinct phases to this stretch of SCMC text:

Turns 1-22: a period where a number of conversations continue simultaneously (a multiple conversational floor);

Turns 8-24: a period where there is one main conversation where many participants hold the floor (a collaborative floor);

Turns 25-36: a period where one participant is the floor holder, supported by others (a speaker-and-supporter floor).

It will be immediately noted that the first and second phases overlap considerably, while there is a clear boundary between the second and third phases. Floor boundaries in SCMC are not necessarily distinct. On this occasion, a collaborative floor is the main

floor in a multiple conversational floor; when the other conversations in the multiple floor are completed, it becomes briefly the only floor in a single collaborative floor. Here the multiple floor continues from turn 1 to turn 22. The floor which emerges at turn 8 becomes the main floor. At turn 23 it becomes the only floor, as previous conversations are completed. At turn 25 the pattern shifts decisively to a single speaker-and-supporter floor.

An analytical technique for discussing floors in SCMC is to isolate individual conversations from the text. Naturally, the objection to this might be: how can we know *post hoc* and without being informed by the participants *which* turns belong to *which* conversation? The answer as always must be that we cannot be certain. Nonetheless, despite the possibility of there being other interpretations, it seems quite clear that all but one turn (turn 5) can be accounted for in the way described below.

In examples 6.19a to 6.19f the individual floors and elements of floors in the stretch of SCMC discourse presented above as example 6.19 are discussed with reference to the features which can be said to influence floor development. Before we turn to these isolated sections, there are three points to note. Firstly, this stretch of discourse text is not a complete textual record of the interaction. The log was originally recorded by VanceS, and the extract here begins forty turns after his arrival at *Tapped In*. However, the other participants had already commenced the interaction. Thus some of the conversations in the example are incomplete; either because they had started before the extract begins, or because they continue after it ends. The example contains no instances of a participant entering or leaving the conversation. However, and while on this subject, an illuminating study of openings in SCMC can be found in Rintel, *et al.* (2001). Secondly, it should be recalled that the disrupted turn adjacency inherent in the medium gives a certain arbitrariness to the position of the individual turns in the text in relation to the other turns. Thirdly, we should also briefly note some activated features of context (Brown and Yule, 1983:75; see section 6.2.4):

VanceS is the founder tutor of the *Webheads* group.

BJB works as a volunteer on the helpdesk at *Tapped In*.

PhilB is an English teacher who coordinates another group at *Tapped In*.

LianA and Sue are English language learners with *Webheads*.

In example 6.19a, the turns of Vance, LianA and PhilB belong to the end of the same conversation, a collaborative floor within a multiple conversational floor which has the

verbal activity *chatting about chilli and China*. The discussion about chilli had been continuing for a number of turns before the beginning of this extract.

(6.19a)

- 1 VanceS says, "I never knew what chili was exactly before"
- 3 LianA says, "come to china, then you will know what it is, vance."
- 6 PhilB says, "Vance, there's a lot of confusion between the words "chili" and "chile" (borrowed from Spanish."
- 15 VanceS says, "I've been to China several times, but never to Wuhan"

Contextual and temporal aspects of the discourse would suggest that much attention is paid to personal speaker's topic (writer's topic?) in SCMC. In example 6.19a above, within a broad topic framework which could be said to be *about* chilli, LianA's speaker's topic is China. This also becomes Vance's speaker's topic in turn 15; a topic drift has taken place within a floor of conversation. Neither the topic of *chilli* or of *China* are developed any further in the interaction.

In Example 6.19b we see the end of another conversation. BJB has been explaining to Sue how to open the graphical interface of *Tapped In*:

(6.19b)

- 2 BJB . o O (that will open a web window to go with your text client)
- 4 BJB . o O (I hope)

We note that BJB is using a device whereby her turn is displayed inside an ASCII 'thinks' bubble. This is done in *Tapped In* by prefacing the turn with the command '/thinks' (See Chapter 4, section 4.3, on *emotes*). We might infer that she uses this technique because the turns are directed towards only one among many participants. It is possible in *Tapped In* to send a turn privately to another participant using the '/whisper' command. That BJB does not do this suggests, in the light of her role with *Tapped In*, that she feels the information might be of use to more than one participant.

Example 6.19c is an exchange of three turns spread over seven turns of the extract.

(6.19c)

- 7 Sue [guest] asks, "Lian, how much did you take on GRE?"
- 9 LianA says, "not very high, only 2160"
- 13 Sue [guest] says, "so hight? i am wondering i can only
take 1500"

The two language learners here are discussing an English language test. Although not proficient in English, they are both adept at SCMC discourse. Both Sue and LianA participate in more than one conversation in this extract; turns by LianA appear in four of the six isolated examples highlighted here.

Example 6.19d is an aside:

(6.19d)

- 17 BJB thinks there are several threads to this conversation
- 22 VanceS . o O (this is a normal consequence of
multitasking)

The topic here is the conversation itself. In spoken discourse the turns would be expected to appear together, as an adjacency pair or as the initiation and response of an exchange. However, here in SCMC they are separated by four unrelated turns. Also of note is the fact that BJB's turn is posted in the third person as an emote or metacomment; that is, a comment on the unfolding conversation. Vance's turn is also an emote, a representation of something other than speech, using as BJB did earlier the cartoon 'thinks' bubble.

Example 6.19e is the main floor of the multiple floor. The previous examples (6.19a to 6.19d) can be considered side floors, or even mere asides, in the multiple floor.

(6.19e)

- 8 LianA asks, "what does burn the scandle from the two ends
mean? who can help?"
- 10 BJB [to Lian]: "how long do you think a candle will last
if you burn both ends?"
- 11 LianA says, "nol not candle but scandle"
- 12 LianA says, "no---typo"
- 14 PhilB says, "Lian, it's a play on words."
- 16 LianA says, "it said if you burn the scandle from 2 ends,
you will be a busy man."

- 18 VanceS says, "Also you will burn yourself out"
- 20 PhilB says, "Normally to "burn the candle on both ends" means to work so much you tire yourself out. With "scandal" instead of "candle" it sounds like Bill Clinton with his hot interns. <g>"
- 21 BJB chuckles. Same result, though.
- 23 VanceS says, "he must have had too many hot interns in the fire"
- 24 LianA giggles

This is a collaborative floor in that four participants are involved in its development. The contention is that it dominates because the verbal activity is *explaining about a phrase LianA has read*, which involves the communicative action *explaining*. The topic, raised quite explicitly by LianA in turn 8, is a phrase that LianA has presumably read or heard and that she wants help in understanding what it means. As noted above, LianA is an English language learner, and *Webheads* is a virtual community dedicated to language learning. In other words, when a language learner raises a language learning point, much of the focus redirects towards that particular floor, the floor becomes collaborative, and the communicative action of the verbal activity orients towards 'explaining'.

In example 6.19f the floor type can also be attributed directly to the participant and the verbal activity:

(6.19f)

- 25 PhilB asks, "Hey, I found a new free resource called "stuffincommon virtual communities". Anyone heard of it?"
- 26 VanceS says, "never"
- 27 Sue [guest] says, "no"
- 28 LianA says, "no"
- 29 PhilB asks, "Wanna see?"
- 30 VanceS says, "sure"
- 31 Sue [guest] says, "sure"
- 32 PhilB says, "It has chat, tools, and a neat whiteboard."
- 33 LianA says, "yes."
- 34 PhilB asks, "I'm going to project. Sue, Lian, do you know about projections?"
- 35 LianA says, "yes"
- 36 Sue [guest] says, "not sure"

This is a single floor with one floor holder being supported by other participants. In the terminology adopted here, from Hayashi (1991) and Cherny (1999), it is a speaker-and-supporter floor. The communicative action of the verbal activity is primarily didactic: PhilB is *demonstrating an internet resource called 'stuffincommon'*. There is a sub-topic in turns 34

to 36: using the *project* command in *Tapped In*. Within this sub-topic, the communicative action continues to be *demonstrating*.

6.3.6 Conversational floors in SCMC: A summary

In this section the concern has been with a limited set of patterns of participation and floor types. There are undoubtedly many other patterns which relate to the development of other floor types. This notwithstanding, the conclusion can be drawn from this analysis that floor development is related to verbal activity. Whether this relationship is causative or reflective, or whether it always or even usually occurs, is at this point open. Further research is needed in this and in other SCMC environments to determine with more assuredness the exact nature of the association.

We are able to state that within the broad context of the *Webheads* SCMC discourse, when the topic of the verbal activity is a language point raised by a learner, the floor tends to become collaborative. It either develops as the single collaboratively constructed floor or as the main floor of a multiple conversational floor. However, when the topic is related to the technologies of electronic literacy (for example, how to build a website; or where a particular resource can be found), the floor often develops into a speaker-and-supporter floor. The participant role is also important. In each case the communicative action (explaining/demonstrating) is pedagogic. However, when the verbal activity is directly related to the acquisition of the second or foreign language (English), a number of participants contribute substantive turns. When the verbal activity is related to the development of the skills of electronic literacy, other participants focus their attention on the single floor holder. We go into matters concerning the connection between conversational floors and learning in SCMC in more detail in Chapter 8.

6.4 Conclusion

In Part Three of this thesis we have proposed and hopefully ascertained that conversation in SCMC is quite different in many ways from spoken conversation. It follows that established approaches to spoken discourse analysis do not necessarily map directly on to a novel form of discourse. For example, as shown in Chapter 5, patterns of turn-taking in SCMC are affected by disrupted turn adjacency, itself a characteristic of the discourse setting – the virtual environment. Hence certain axioms concerning turn taking in spoken discourse do not apply to conversation in the computer-mediated

discourse setting. In Chapter 6 it has been maintained that the notion of the conversational floor is a useful one in the study of discourse where cohesion is looser than in the spoken mode. Furthermore, a claim has been made that the development of certain floor types is associated with (a) the roles of the participants in the discourse; (b) the topic of the discourse; (c) the current communicative action or, generally speaking, the purpose of the discourse. In the final part of the thesis to follow, the issues are language learning and the development of the skills of electronic literacy with SCM.

Part Four: Learning online

Previous parts of this thesis have addressed issues central to computer-mediated communication: the nature of a community whose members meet on the internet (Part One); aspects of literacy and electronic literacy (Part Two); and the creation of coherence in online discourse (Part Three).

Here, in Part Four, we turn to the final facet of this investigation into the language of computer-mediated discourse: online learning. Many virtual communities and online groups have a stated purpose oriented towards learning, as discussed in Chapter 2. The learning and teaching of the English language is ostensibly the main concern of the *Webheads* virtual community. In the final part of this thesis, it is appropriate to devote attention to (a) the pedagogic milieu within which the group exists, and (b) the relationship between the discourse of SCMC and learning online within the group. Online English language learning and teaching is intertwined with issues of globalisation, with the rise of the information age, and more narrowly with the development and future direction of computer-assisted language learning (CALL), issues addressed in Chapter 7. But we used the word *ostensibly* above advisedly. For participants in the *Webheads* virtual community through which we are examining CMC are often as concerned with the development of the skills which enable them to communicate online and participate in the community interaction as they are with language learning. These are matters for Chapter 8.

In Part Four therefore, we maintain the balance of previous parts of the thesis whereby the first chapter provides a literature-based foundation for the second, data-led chapter. Chapter 7 is entitled *CMC and language learning*. The intention is to engage with the broader literature on network-based language learning and teaching as a means of contextualising the analysis in the following chapter. Such an aim inevitably draws on a number of different areas. These divide broadly in Chapter 7 into an overview of global issues and an examination of the concerns of two research traditions in the field of online language learning. This provides a foundation for the content of Chapter 8, *Learning and SCMC discourse*. There, we analyse the various perceptions which participants in the group themselves have of learning with *Webheads*. Then we examine specific instances when the interaction is form-focused. Finally we discuss the development of the skills of electronic literacy with *Webheads*.

The subject matter of Part Four of the thesis draws on work in previous chapters in a number of ways. The nature of a virtual community, as discussed in Chapter 2, is again at issue. Roles and identity, under investigation in Chapter 4, are significant in the discussion of types of learning in Chapter 8. The way in which particular types of conversational floor develop (Chapter 6) also informs the examination of learning in the SCMC environment in Chapter 8.

Chapter 7. CMC and language learning

7.1 Introduction

In this chapter we relate CMC, in particular synchronous text-based CMC (SCMC), to the learning and teaching of English online. This is done in two ways. Firstly, and of necessity only briefly, we explore some aspects of the meeting of two global phenomena: information and communications technologies (ICTs) and the English language.

Secondly, we discuss recent developments in research into CMC-based computer-assisted language learning (henceforth *CMC-based CALL*). The chapter is intended as a basis for analysis and discussion in Chapter 8 of the discourse of learning which actually occurs in a text-based virtual community of language learners and tutors.

Section 7.2 puts our study of the discourse of an online language learning community into perspective with an overview of the modern expansion of ICTs and the global extension of English. The role of information and communication technologies (ICTs) in the post-industrial world mirrors to an extent that of ICTs in language learning and, more broadly, in the development of electronic communicative competence: a major concern of this thesis. That is to say, ICTs are an integral part of the modern communications landscape. And the central position of the English language in this landscape also has its reflection in the context of this study of computer-mediated discourse which employs data drawn from an online English language learning community.

In section 7.3 we outline roles and definitions which are used to help conceptualise the position of the networked computer in the field of language learning. Common and less common distinctions in a number of dimensions are appraised with a view to ascertaining a useful perspective on the place of CMC in CALL.

Research into CMC-based CALL has generally been undertaken with an orientation towards *either* SLA research in the interactionist tradition *or* research from a sociocultural perspective. In sections 7.4 and 7.5 we evaluate the usefulness of each paradigm for CMC-based CALL. Section 7.4 is a critique of attempts to harness research into CALL to a mainstream SLA research agenda. Both this move, and the foundations upon which it rests, are critically appraised. In section 7.5, the focus is on sociocultural approaches which purport to recognise the social aspect of learning. We look at three areas held to be of importance within a sociocultural paradigm: scaffolding, participation, and

collaboration in learning. The conclusion is reached that research into CMC-based CALL would benefit from a greater understanding of issues pertaining to CMC discourse *per se*.

7.2 Technology, globalisation, and the spread of English

Just ten years ago ... it was very common for those involved in CALL to say that 'A computer's just a tool; it's not an end in itself but a means for learning English.' ... Yet earlier this year, an English teacher in Egypt told me this, and this is a real quotation from a real teacher: 'English is not an end in itself; it's just a tool for being able to use computers and get information on the Internet.' (Warschauer, 2001:4)

Warschauer's observation provides the springboard for this section on technology, globalisation and the spread of English. Reasons for studying English undoubtedly now encompass learning the language as a means to a technological and informational end, as Warschauer suggests, just as the status of the language as a global *lingua franca* is being acknowledged. The current investigation of the language of computer-mediated discourse has aimed to use the example of an online language learning group to address wider questions. The wider questions in this section concern the technologies of information and communication (ICTs), globalisation, the position of English as a global language and as the language of online communication, and the issue of inequality and the so-called *digital divide*.

7.2.1 ICTs and Globalisation

The economic, political, technological and cultural phenomenon of globalisation is enabled by ICTs developed since the mid to late twentieth century. The role played by technology in globalisation should not be underestimated. As Giddens (2002:10) puts it: 'Globalisation ... has been influenced above all by developments in systems of communication, dating back only to the late 1960s.' Castells also stresses the enabling role of ICTs on globalisation and the global economy (2000:101): '... it was only in the late twentieth century that the world economy was able to become truly global on the basis of the new infrastructure provided by information and communication technologies, and with the decisive help of deregulation and liberalization policies implemented by governments and international institutions.'

Castells also coined the term *informationalism* to refer to the current stage of global capitalism. Warschauer (2003:13) describes informationalism as being the third industrial revolution: '... an information economy in which computers and the internet play an essential enabling role.' He sets out the characteristics of this third industrial revolution

in relation to the first and second industrial revolutions in a table (2003:13) which is reproduced in slightly adapted form below as figure 7.1:

	First Industrial Revolution	Second Industrial Revolution	Third Industrial Revolution
Beginning	Late 18 th century	Late 19 th century	Mid-to-late 20 th century
Key technologies	Printing press, steam engine, machinery	Electricity, internal combustion, telegraph, telephone	Transistor, personal computers, telecommunications, Internet
Archetypal workplace	Workshop	Factory	Office
Organisation	Master-apprentice	Large vertical hierarchies	Horizontal networks

Figure 7.1 The three industrial revolutions

Personal computers, telecommunications and the internet are considered key technologies not least because they allow faster communication, hence faster and more pervasive diffusion of ideas. Significantly for the present study they also allow for the development of online communities and cultures, with *communication*, rather than *information*, being more prominent (see Chapter 2). ICTs, however, are only the tools of informationalism. Interaction for whatever purpose is carried out between *people* using *language*. Correspondent with the growing importance of ICTs has been the use of English as the language of online communication, and of globalisation in general. It is to English as a global language and as the language of online communication we turn next.

7.2.2 English as a global language

The spread of English as a global language is well-documented. Crystal (1997) and McCrum, MacNeil and Cran (1992) present general introductions to the history of English as a world language. Graddol's (1997) document is an account of the future global status of the language. Critical perspectives and discussions of linguistic imperialism are provided by Phillipson (1992) and Pennycook (1994, 1998); Holborow (1999) offers a Marxist interpretation of the spread of English, while Kachru (1985, 1986) discusses non-native Englishes. Recent work by Jenkins (2000) and Seidlhofer (2001, 2002) aim to open discussion of English as an international language (EIL) or a lingua franca (ELF).

One familiar model of global English is the division of English in the world into an inner, outer and expanding circle. This system (Kachru, 1985, adopted by Crystal, 1997)

pictures the English-speaking world as three concentric circles. The *inner circle* comprises 'the traditional bases of English, where it is the primary language' (Crystal, 1997:53). In the *outer circle*, comprising in the main former British colonies, English plays an important administrative and institutional role, and is recognised as an official language. The *expanding circle* is where the importance of English is acknowledged, though the language holds no special institutional status, nor is there a history of colonisation by members of the inner circle. It is in the dynamic expanding circle that much interaction in English as a Lingua Franca (ELF) takes place. This three-way distinction is consistent with the traditional division of speakers of English into native speakers, speakers of English as a Second Language (ESL) and learners of EFL. The inner circle is where speakers of English as a first language (L1) can be found. Numbers of speakers of English in the inner circle are said by Crystal (1997) to be 320-380 million. English as a second language (L2) is spoken in the outer circle; Crystal estimates 150-300 million of these speakers. 100-1000 million speakers and learners of English as a Foreign Language (EFL) live in the expanding circle.

A number of criticisms may be levelled at what we shall refer to as the circles system, useful though it is as a model for providing an overview. For our purposes the most significant inadequacy of the circles system is that, bound as it is by history and geography, it does not take account of the reality of many people's individual language experience, local trends and situations. For example, it does not allow for bilingualism, geographical movement or individual language learning history. Nor does it account for the existence of global sites of language use online: virtual communities and their host environments. We might consider the literacy and language learning experiences of an individual who has moved from one geographical circle to another and has gained competence in the skills of electronic literacy. Here we use the example of Almon, the subject of Lam's (2000) case study. Almon was born in Hong Kong, in the outer circle of English according to Kachru's model, though he spoke no English until he emigrated to the USA (inner circle) at the age of 12. Even five years after his arrival in the USA he still felt his lack of English rendered his position in American society a marginalised one. However, he developed considerable electronic literacy skills, designing and maintaining a web page and participating, in English, in a large amount of asynchronous and synchronous CMC discourse. Thus, from being a non-speaker of English in an 'outer circle' area, he became an L2 speaker of English in an 'inner circle' area; however, his electronic literacy skills advanced to the extent that they: '... enabled him to develop a

sense of belonging and connectedness to a global English-speaking community' (Lam, 2000:76). The example of Almon highlights the shortcomings of the distinctions between inner, outer and expanding circles of English as being over-simplistic and somewhat anachronistic in the age of global electronic communication. This example also raises questions of the very nature of 'nativeness' and what it is to be a 'native speaker' of English on the internet (*cf.* the useful re-evaluation of 'nativeness' by Rampton, 1990). Almon's electronic literacy skills are clearly ahead of those of many native speakers. In this respect he is a more competent communicator, has a greater electronic communicative competence, as a 'non-native speaker', than a 'native speaker' would be under the same communicative circumstances. In Chapter 8 we find examples of the very same phenomenon; in addition, we see how learners of English adopt tutoring roles when the discussion turns to the skills of electronic literacy.

Almon's fear that his deficiency in English would marginalise him from American society is an echo of the general concern in many parts of the world that ignorance of English results in lack of success and prestige, and may partially account for the success of a community such as *Webheads*. A contemporary reworking of the old truism might be: the *English* language is power. Graddol gives voice to this feeling most clearly (1997:38):

In many countries English has been implicated in social and economic mechanisms which structure inequality. Whereas in the past, poverty has been largely a matter of geography, class, gender and ethnicity, now it may also depend on access to the lingua franca of a global elite.

It is certainly the case that a knowledge of English is often a prerequisite for employment or study opportunities, whether or not knowledge of the language is necessary for a particular post, as noted by Graddol (1997:32). Such a perspective on knowledge of English corresponds with Bourdieu's (1991) view that competence in foreign languages represent *linguistic capital*. The position of English, and the reasons for learning English, could be said to be primarily economic. Block and Cameron (2002:5) express it thus: 'Some commentators have suggested ... that languages are coming to be treated more and more as economic commodities, and that this view is displacing traditional ideologies in which languages were primarily symbols of ethnic or national identity.' We return to this question when discussing access and inequality later in this section.

At this point we turn to the dominance of English as the language of online communication. English became the language of the internet partly because the internet itself arose in the United States and its English-speaking designers used programs which relied on an English language interface (Warschauer, 2003:96). The early ascendancy of

English on the internet was maintained by the fact that network computers were mostly used in predominantly English-speaking western countries, again particularly the United States. Graddol (1997:51) estimates that in 1997, 90% of computers connected to the internet were based in English-speaking countries (the 'inner core' of English). This dominance of English is waning somewhat. While in the 1990s, an estimated 80% of internet traffic was in English, this figure is expected to have fallen to 40% by 2010 (Graddol, 1997:61), as internet access grows in other parts of the world, and as technological advances allow for the expansion of operating systems and web page authoring software in non-Roman scripts (Warschauer, 2003:98).

Warschauer, however, suggests that as short-term advantages of English as the language of the internet decrease, so the long-term position of English becomes more entrenched and established. This is because English was already the *de facto* global language before the creation of the internet. The internet, maintains Warschauer, requires a global language by the very fact that it enables global communication. Furthermore, he suggests (2003:98) that: 'A mutually reinforcing cycle takes place, by which the existence of English as a global language motivates (or forces) people to use it on the Internet, and the expansion of the Internet (and online English communication) thus reinforces English's role as a global language.' People will, maintains Warschauer, use their own language for local communication, but will (be obliged to) use English for global communication.

The importance of English as the language of online communication could well be said to have an economic basis associated with the commodification of language. It was suggested above that knowledge of a language represents linguistic capital. A drive to learn English for online communication need not, however, be purely economic. We recall that Almon, the subject of Lam's (2000) study, was concerned about his 'sense of belonging and connectedness' to a world-wide online community whose interaction was in English. Whether the motivation to participate in online communication in English is economic or social, ultimately questions of access inevitably arise, and it is to these we turn next.

7.2.3 Inequality and the information poor

For people in developing countries, simple access to the hardware of ICTs and to the connections to global networks is frequently denied, through cost and a lack of availability. There is concern, says Graddol (1997:39) that: '... unequal access to

information technologies will create new distinctions between the information poor and the information rich.’ Such distinctions are commonly termed the *digital divide*.

However superficially helpful the concept of a digital divide, which is to say, a divide between those who have access and those who do not, the situation is often more complex than this. Commentators on technology and access such as Jarboe (2001), Hargittai (2002) and Warschauer (2003) propose a shift of focus away from the question of simple access to technology and towards the social circumstances of its use.

Warschauer (2003: Chapter 1) suggests five ideological reasons for criticising the dichotomy implied by the concept of a *digital divide* which can be summarised below:

1. The concept of a digital divide attaches overriding importance to the physical availability of computers and connectivity.
2. The implication of a digital divide is of a bi-polar split (the *haves* and the *have nots*).
3. The concept is patronising: it encourages a stereotyping of disconnected social groups (e.g. African Americans or Hispanics in the USA).
4. The concept implies a chain of causality: lack of access harms life chances.
5. The overemphasis on computers and connectivity provides a poor roadmap for using technologies to promote social development.

Warschauer proposes an alternative framework to that of the digital divide. Rather than attempting to lessen a digital divide which emphasises hardware and connectivity, he argues for a consideration of ICTs as they relate to social inclusion, whereby: ‘... individuals, families, and communities are able to fully participate in society and control their own destinies, taking into account a variety of factors related to economic resources, employment, health, education, housing, recreation, culture, and civic engagement’ (2003:8). Access to new knowledge using new ICTs (rather than access to ICTs themselves) is seen as vital to social inclusion.

The overall theme of Part Four of this thesis – online learning – relates to questions of a digital divide and social inclusion insofar as participants in the *Webheads* group under investigation are concerned with issues of language, community, identity and technology. These are intertwined matters which have come to the fore in this era. Here we present a short example from the *Webheads* archives of how questions of access impinge on an individual participant in the group.

Access and inclusion: A Webheads example

Stevens (2000b) describes *Webheads* as: ‘... a community of online language teachers and learners who have been meeting in various cyber-venues since 1998.’ Accurate though this description may be, it glosses over some difficulties involved with such participation. We can see in the email sent to the *Webheads* e-class in October 2002 and reproduced below as example 7.1 that ‘meeting in various cyber-venues’ is not as straightforward as it might sound.

(7.1)

To Dr Steele

I am very much interested in having talks with you on Tapped In. Unfortunately in my hometown, the Internet connection is so slow that I cannot even open a web site. The only thing that I am able to do is sending and receiving email.

In doing such a nice talk, I have to go downtown to reach a faster Internet connection in the net café. But it takes about 6 hours by car to get there. I have to take a day off to get in there back and forth.

I will have got days off on Sunday 3 Nov until Thursday 6 Nov 2002. Will you be free in that time period?

I have some questions, Could you please help me by telling me the answers?

1. I live in Java and use Jakarta time (Indonesia). Is it right to convert 12.00 noon GMT into 07.00 p.m. Jakarta Time?
2. I usually use Yahoo Messenger and have never used another software. I do not know how to begin on line talks with different medias/softwares. Would you be so kind as telling me what and how can I have on line talks with you?

It is a privilege to have your answers.

Respectfully yours

It is not simply the case that the writer has no access to a computer with an internet connection. In fact, as he says, even the slow internet connection in his home town allows him to use email. He evidently possesses the electronic literacy skills to find *Webheads* on the internet and to join and participate in the email discussions: he wrote the email after all. But he also wishes to contribute to the SCMC sessions hosted at *Tapped In*, and cannot do so with this local connection: perhaps the bandwidth is too narrow, or the connection is too slow or erratic. A reliable internet connection can evidently not be taken for granted in rural Indonesia. The writer is prepared to go to great lengths to participate in SCMC interaction, even travelling six hours to an internet café and forgoing his days off to do so.

There are two other matters raised in, and raised by, this email. The question about time zones points to a practical problem in co-ordinating the activities of a global online community. To travel six hours to participate in the chat, using a day off in the process, only to have missed the session by an hour because of time zone difficulties, would be disappointing to say the least. The second question about the software required to participate in the SCMC sessions at *Tapped In* raises a slightly different issue of access. That is, not only does the writer need access to a computer and a fast, reliable internet connection to get into *Tapped In*; he also needs access to the resources – the teachers and the online help – which allow him to use the technology effectively. And if he then wishes to participate in synchronous voice and video CMC with others in the community, further levels of access and help are required.

7.2.4 Summary: *Online communication in English*

The writer of the email in example 7.1 is a doctor working in the emergency department of a hospital in a rural area of Java, 200 miles from Indonesia's capital, Jakarta. He speaks some English, but feels he will benefit from the practice to be gained online in a text-only SCMC session. The reasons why he feels such a strong need to communicate in English online are personal and individual, but are no doubt connected in part to competing and not necessarily complementary arguments which have emerged in this section concerning technology, globalisation and the spread of English. We can review these areas here:

1. The ability to communicate in English online has an economic imperative in the information age. Competence in English represents linguistic capital (Bourdieu, 1991) and is to be gained as a means to opening career and financial opportunities.
2. The ability to communicate in English online allows for participation in new online cultures and communities. Associated with such participation are the possibilities an individual has of exploring aspects of electronic literacy such as those outlined and exemplified in Chapter 4.

It is doubtless possible for an individual learner to hold both views about the use of English online.

Having established the importance of both English and ICTs, we turn now to current approaches to the teaching and learning of English which utilises those ICTs.

7.3 Researching CMC-based CALL

In section 7.3 we investigate how CMC, in particular text-based synchronous CMC (SCMC), relates to pedagogic practice and research into computer-assisted language learning.

Firstly, CMC is positioned within CALL in general. We also explore the distinction between CMC-based CALL that operates on a local level and that which is global. We then move to discussion of research paradigms for CMC-based CALL, bearing in mind the distinctions made previously. The section can thus be seen as a lead-in to further discussion (in sections 7.4 and 7.5) of the two major research traditions in CMC-based CALL which have as their bases differing and, to an extent, conflicting conceptions of language learning. These are the tradition associated with interactionist SLA, and that associated with the social theory of Vygotsky.

7.3.1 Positioning CMC within CALL: roles and definitions

Kern and Warschauer (2000) position approaches to CALL within three broad linguistic orientations: structuralist, cognitive, and sociocognitive (with the focus on the ‘socio’). Despite the false implication that such matters are clear-cut, the three-way distinction serves as a framework for an overview of the evolving roles of the computer within each paradigm. These are often viewed in terms of apposite metaphors. The structuralist paradigm is associated with drills, grammar and vocabulary exercises and testing. The role of the computer within such an approach is ‘quizmaster’ and ‘knower-of-the-right-answer’ (Jones and Fortescue, 1987:5) or ‘tutor’ (Taylor, 1980, cited in Levy, 1997:83). In a cognitive model of CALL, computers provide learners with opportunities for problem-solving and hypothesis testing, in particular in simulated environments. Learners are responsible for doing something with the resources provided by the program (Kern and Warschauer, 2000:9); in Jones and Fortescue’s terminology the computer is viewed as a ‘stimulus’ (1987:6). Kern and Warschauer state that in a sociocognitive framework, meaning is located: ‘in the interaction between interlocutors, writers and readers; constrained by interpretive rules of the relevant discourse community’ (2000:7). In a sociocognitive approach to CALL, the computer is considered to be a ‘tool’ (Levy, 1997:83) or a ‘toolkit’ (Crook, 1994, cited in Kern and Warschauer, 2000:11). CALL within the sociocognitive framework has, for Kern and Warschauer (2000:13), a CMC role: ‘To provide alternative contexts for social interaction; to facilitate access to existing discourse communities and the creation of new ones.’

Levy's concept of *computer as tool* is somewhat wider, and subsumes the CMC role. According to Levy (1997:84): 'This role for the computer [as a tool] is a fundamental one. It is the basis for the computer's widespread acceptance and use ...'. Levy lists some computer tools that can aid language learning: word processor programs, concordancers, email, text-based and video-based computer conferencing [synchronous CMC], dictionaries, databases and archives (1997:84). For Levy, the conceptualisation of computer as tool also enables a shift of control towards learners, focusing on: '...how well the tool helps the user accomplish the task, not how well the computer can teach' (1997:204).

Levy's later (2000) distinction is more basic than the tutor/stimulus/tool metaphor. He distinguishes artefact CALL from CMC-based CALL, the concern of this chapter. A CALL artefact, in Levy's words (2000:179) '... can include any [CALL] materials that have been specially designed and created for the purposes of language learning.' CMC-based CALL is CALL used for human-human interaction, *via* email, text-based CMC, audio and video conferencing, and discussion lists. These twin poles of CALL do not, acknowledges Levy, constitute the entire range of CALL research. For example, De Ridder's (1999, 2000) work on hypertext links and reading on the www fits neither description clearly. Moreover, the pedagogic use of computer-based corpora and concordancers is neither artefact CALL nor CMC-based CALL. Levy's distinction does, however, illuminate the difference between computer as tutor and computer as tool. In summary, and to quote Levy (2000:183): 'Whereas artefact design generally sets the computer into the role of tutor for human-computer interaction, CMC-based CALL uses the computer in the role of tool to facilitate human-human interaction. Not surprisingly, the research goals and methods are rather different in focus and intent in each situation.'

We should add to this set of roles the one noted by Warschauer and cited towards the beginning of this chapter: that is, the role of *English* as a tool to access the internet and make use of the technologies of ICT (Warschauer, 2001:4).

7.3.2 CMC, LAN CALL and World CALL

The simplest classification of CMC as it applies to CALL might distinguish modally between text-based and non-text-based, and temporally between synchronous and asynchronous. Such a classification was suggested as a starting point in Chapter 1 (see figure 1.1). There is a further distinction: between CMC-based CALL on local area networks (LAN CALL) and CMC-based CALL which takes place over a global network,

principally the internet (World CALL). The items of terminology *LAN CALL* and *World CALL* were coined by Debski and Levy (1999). Asynchronous World CALL, in the form of email exchanges, has long been available; early synchronous CMC-based CALL was restricted to LANs, usually operating within a local physical space such as a computer laboratory. Differences in pedagogic focus were clear in early studies of asynchronous World CALL on the one hand and synchronous LAN CALL on the other. Online meetings of students in different countries utilising email and bulletin boards have been possible for a number of years; many such projects are documented in Warschauer's (1995) collection of reports. Synchronous LAN CALL was limited to the use of SCMC sessions as supplements to classroom discussion or writing lessons within a school or a college. This restriction is reflected in the nature of early SCMC-based CALL research, much of which comprises qualitative descriptions of learners' oral and SCMC interaction. A particularly strong and useful vein of research in this tradition centres around the pedagogic use of the *InterChange* program developed by Daedalus Inc. (e.g. Kern, 1995b; Kelm, 1992; Beauvois, 1992; papers in Swaffar, Romano, Markley and Arens, 1998; Patterson, 2001). With the continuing development, sophistication, and, in many parts of the world, ease of access to ICTs, particularly MOOs and IRC, text-based SCMC has become increasingly used in World CALL. Specific SCMC-based World CALL projects thus tend to relate to long-distance international meetings of one sort or another, just as their email equivalents do. The *Webheads* group can be considered an extended World CALL project in this sense.

Debski and Levy note that World CALL presents an enormous diversity of activities which are facilitated by the www: distance learning programs, L2 reading on the www, collaborative learning projects using synchronous and asynchronous CMC, and access to groups of native speakers. Realising (in both senses of the word) this potential is to take the *macro* view of World CALL. Questions pertaining to the themes of appropriacy and context are associated with a *micro* view of World CALL. Debski and Levy raise the question of appropriacy (1999:9):

... though the potential is there for a certain kind of shared, global technological infrastructure to be set in place, it is vital to remember that technology does not exist in a vacuum. Its introduction is governed quite rightly by the goals and aspirations of its users and the resources that are available: what is judged to be appropriate in one context may simply not be appropriate in another.

Debski and Levy conclude that we need both the macro and the micro view of World CALL: to 'collaborate where we can, sharing human and material resources; and to embrace and value difference in a world where communication across different languages

and cultures continues to evolve and grow through the development of new technologies' (1999:9).

7.3.3 CMC-based CALL research

Research into CMC as an emerging area of study within CALL is still at an early stage and, as with most areas of applied linguistics, there is no unified approach. Levy (1997:151) notes the heterogeneity of approaches to CALL:

When CALL is viewed as a whole, as a body of work, the diversity is remarkable. With no agreed agenda for research and development, with a sensitivity to local conditions, and with the flexibility of the computer, materials developers have conceptualised CALL in many ways, and they have drawn their theoretical base and practical orientation from many sources.

This may be seen as an advantage to an emerging field. But Levy says elsewhere (2000:170): 'Situating CALL research and practice within well-defined or established theoretical and methodological frameworks is a way to bring coherence to a field that is sometimes perceived as lacking in focus and direction.' In the following sections we discuss CALL research within two such established approaches: interactionist second language acquisition (SLA) and the sociocultural paradigm. In recent years there has been much attention on situating CALL research within one or another of these areas. Below we ask how useful is the application of such explanatory models to CALL research, in particular the CMC-based CALL research which is of direct relevance to the *Webheads* group. We should also note that there is much in the experience of participation in SCMC discourse which is simply beyond the remit of conventional language learning theories.

7.4 CALL and interactionist SLA

There have recently been attempts to establish CALL theory within the tradition of a current dominant paradigm of mainstream second language acquisition research: the *interactionist* approach to SLA. In particular, the roles of input, output and interaction for negotiation for meaning have been posited as the basis on which CMC research should be grounded (most notably by Chapelle, 1997; 1998; 1999; 2001). This section provides an outline and critique of this movement.

7.4.1 Input, output and interaction

Achieving a clear description and explanation of interaction in CMC as used by language learners is a central goal of a good deal of CMC-based CALL research. However, much investigation into interaction is characterised by a certain narrowness of perspective, linked as it often is with the mainstream SLA tendency to concentrate on areas of communication such as input and focus on grammatical form. Chapelle (1997), for example, attempts to set a research agenda for CALL by advocating the application of research on 'instructed SLA' to CALL and language learning.

Chapelle suggests that a central aim of CALL research is to evaluate the quality (accuracy, fluency) of language which learners use. This, she says, can best be done by utilising classroom and 'experimental' research into second language acquisition. In particular, she focuses on the roles of input, output and interaction. Chapelle is, in fact, quite clear where the research focus should lie (1997:22):

For hypotheses about what to look for in a learner's language, CALL researchers can turn to the work of interactionist SLA researchers who operate under the assumption that the L2 is acquired through learners' interaction in the target language because it provides opportunities for learners to: (a) comprehend message meaning [...] (b) produce modified output [...] (c) attend to L2 form.

Her position in the 1997 paper is summarised thus (1997:28):

... if progress is to be made in CALL, it seems necessary to shift from general approaches such as those of psychology, computational linguistics, and educational technology to the specific questions and methods of researchers who investigate instructed SLA. With SLA research as a basis for investigation of CALL, the paradigm search for the next decade can be a quest for methods that complement our fundamental understanding of the language experience learners engage in through CALL activities.

The assumption of this approach to CALL research is that language learning is something quite tightly defined in terms of message meaning, production of output and attention to linguistic form. What is more, it can be considered separately from its broader social context. In her book (2001:58) she has this to say:

Tasks not intended to promote language learning in more than an incidental way, may be good for other purposes, but it would be difficult to argue that they should play a central role in L2 teaching. CALL tasks can also be intended to work towards a number of objectives such as developing learners' social identity in the target culture, increasing their computer literacy, strengthening their cultural awareness, or developing strategies for language learning. These outcomes may be positive impacts of the CALL task, but in designing language learning tasks, the criteria of language learning potential should be considered the most important.

The question to be asked of language learning potential in a CALL task is provided a page later (2001:59): 'Do task conditions present sufficient opportunity for beneficial focus on form?'

Such a reductionist view of language learning is based on a model of communication which has as its focus the linguistic message and form, and the processing of the linguistic message and form by learners. The metaphors involved highlight the view of ‘the learner’ (as learners are usually termed) as an entity concerned with the processing of input and the production of output. This perspective on communication, though explicitly concerned with ‘interaction’, denies the very interactive nature of communication itself. As the anthropologist Ruth Finnegan puts it (2002:21):

To see human communicating – and humanity – essentially in terms of mental representations and information-processing not only accords ill with a view of communication as an interactive process but also directs attention away from the communicative potential of the body as a whole and of the modes other than verbal language through which in practice we interconnect ...’

From the point of view of one concerned with the nature of communicative competence in the modern world, the interactionist SLA approach to CALL research neglects important factors such as the role of the technology, the development of the skills associated with its use, and the social setting within which the interaction occurs.

The foundations upon which the interactionist SLA approach to CALL research are based are themselves somewhat suspect. To take one example, Chapelle (1997) stresses the importance of comprehensible input in the language learning experience. ‘Good input, that is “comprehensible input” (Krashen, 1982), needs to play a role in helping the learner accomplish the task goal’ (Chapelle, 1997:25). However, while it is one thing to say that learners need input to learn, determining the nature of comprehensible input is plagued by inconsistencies, contradictions and lack of solid evidence (see Mitchell and Myles, 1998:126; McLaughlin, 1987:39; Widdowson, 1990:24-5).

7.4.2 Interaction, negotiation and focus on form

A pillar of interactionist SLA research, and of CMC-based CALL research in the same tradition, is the interaction hypothesis. In the interactionist view of SLA, it has been hypothesised that the development of the L2 can be facilitated by modification to input and in particular of interaction. Such modification can, argues Long (1983), render input comprehensible to learners of the L2. Modification can take place through negotiation for meaning. Mitchell and Myles summarise studies in the tradition, many of which have a quasi-experimental design whereby native speakers are teamed with non-native speakers (1998: 128):

As they struggle to maximise comprehension, and negotiate their way through trouble spots, the NS-NNS partnership is incidentally fine-tuning the L2 input, so as to make it more relevant to the current state of

learner development. That is, they are collaborating to ensure that the learner receives $i+1$, in Krashen's terms, rather than $i+3$, or indeed $i+0$.

Also highly desirable in such an approach is that during the negotiation, there should be some focus on form. This form is generally taken to mean grammatical form (see papers in Doughty and Williams (eds.), 1998). In classroom contexts the learners' attention can be directed explicitly to grammatical form by the teacher in the course of negotiation for meaning. In 'experimental' settings it is hoped that the focus on form will arise incidentally. This is so despite arguments advanced by SLA researchers and noted by Mitchell and Myles (1998:138-9) that SLA: '... cannot take place purely as a result of implicit and incidental learning.' Finally there is a view, both in so-called empirical studies and in classroom teaching, that the 'task' should be manipulated to promote form-focused (i.e. grammatical structure-focused) interaction. The problem is that unless the context of the interaction is highly contrived, negotiation for meaning tends not to lead to the desired form-focused modifications, as found in studies by Foster (1998) and Mackey, Gass and McDonough (2000).

Research into CMC-based CALL in the SLA tradition illustrates that similar types of shortcomings that can be identified in spoken SLA research (in terms of methodology and initial conceptualisation) pertain equally here. Learners in Blake's (2000) study, using the program *InterChange*, were required in a laboratory setting to complete the same type of jigsaw and information-gap tasks that have been claimed to promote more form-focused negotiations for meaning than other task stimuli (Pica, Kanagy and Faldoun, 1993). Blake found that the rare instances of negotiations which the subjects produced were restricted almost entirely to incidental lexical negotiations, to the almost complete exclusion of syntactic negotiations. Blake concludes (2000:133) that:

While the positive impact of negotiations in vocabulary development seems fairly obvious ... , it is not at all clear that *incidental* negotiations will ever suffice for supplying all the types of evidence needed to come to grips with the many syntactic difficulties still plaguing the intermediate learner's grammar. ... Few interactionist studies have demonstrated that incidental negotiations within a task-based approach might stimulate a comprehensive development of the learners' morphological and syntactic problems on a larger scale.

Pellettieri (2000) also found that the vast majority of negotiations which occurred in interaction using the SCMC program *ytalk* were triggered by lexical, rather than morphosyntactic, items (2000:71). Subjects in her study, intermediate learners of Spanish, were required to carry out a series of 'communication tasks' ranging from open conversation to jigsaw-type activities. The research design obliged them not to communicate in English, and they were 'separated visually'. Despite such constraints, the

sought-after negotiations mainly pertained to lexical items and overall content. Such is the imperative to produce negotiation which forces learners to focus on grammatical form, however, that she finds herself proffering the following advice (2000:83):

Synchronous NBC [network-based communication] language tasks should be goal-oriented, with a minimum of possible outcomes, and they should be designed in such a way that all participants are required to request and obtain information from one another for successful task completion.

It can only be wondered how long students would wish to pursue a course of language learning with content based on this premise. As we have already seen, and as will be shown again in Chapter 8, authentic, naturally-occurring SCMC interaction in a virtual language learning community is far more conversation-focused and play-focused than task-focused.

The emphasis on message and meaning in the interactionist approach to SLA has been criticised on the grounds that it neglects the importance of other contextual features of learning. For example, Donato (1994) argues that: ‘...framing the study of L2 interaction in the message model of communication masks fundamentally important mechanisms of L2 development and reduces social setting to an opportunity for ‘input crunching’. ... In the end, the social context is impoverished and undervalued as an arena for truly collaborative L2 acquisition.’ Cook provides a critique of research which is based on assumptions that SLA would be triggered by comprehensible input or by interaction in which there was negotiation of meaning (2000:174). He does this on the grounds that such assumptions tend to separate the formal language system from its social and psychological uses. Other theories, notes Cook (2000: 175): ‘...stress the social and pragmatic aspects of language acquisition, viewing the acquisition of formal systems as inseparable from the social context of their use.’

The notion that CALL research should restrict itself to research in the tradition of instructed SLA has been criticised by Salaberry (1999) and Harrington and Levy (2001) as being both too narrow and flawed. In her later (2001) book Chapelle somewhat redresses the balance by acknowledging that other approaches to CALL research complement the instructed SLA approach, though as we have seen, she maintains that the activity of language learning takes place only within the boundaries of what is studied in mainstream SLA. Harrington and Levy (2001) present a refutation of the stance taken by Chapelle in her 1997 and 1999 papers. They do not reject the role that SLA theory might play in research into CALL which is related to language acquisition; rather, their criticisms rest on two untenable assumptions of what they term the interaction account – IA – to

CALL research. Firstly, they question the degree of similarity between traditional face to face interaction and computer-based interaction. ‘The IA-based approach assumes a fundamental similarity between the two, and thus the direct applicability of the IA to CALL interactions’ (2001:18). Secondly, differences between the various modes and interfaces of CALL are minimised, and this assumption of a homogeneous CALL fails to take into account the ‘mode-specific influences on language learning and use’ (2001:18). We have already found in Chapters 4, 5 and 6 that there are marked differences in patterns of interaction between spoken and written conversation, some of which can certainly be attributed to the fact that one mode is computer-mediated. Harrington and Levy conclude their argument thus (2001:17):

At issue is whether the IA view as a research framework can adequately capture the nature of computer-mediated language learning and use. We are also concerned that orienting CALL research in the manner proposed [i.e., towards research into instructed SLA] largely relegates it to the application and implementation of SLA findings, rather than as a source of basic research in its own right.

To summarise, studies of SCMC-based CALL carried out under experimental conditions and with a limited conception of communication and communicative competence cannot by their nature inform us about learning done by a self-selected group of learners who meet naturally. The use of SCMC by such learners allows them to do far more than engage in individual language learning exercises, or ‘tasks’, the study of which informs SLA theory. As Warschauer says (1997:471), the use of CMC can enable learners to become competent members of a speech community or social group, to gain important cultural knowledge or content matter, to develop literacy skills or critical thinking skills. We can add that however understandable the temptation for SLA researchers to consider CMC interaction in terms of face-to-face interaction, it is a mistake to do so. The speech-like nature of synchronous CMC provides an ideal means of observing ‘conversation in slow motion’ (Beauvois, 1992). However, and as has been previously stressed, SCMC is not speech.

As we see in the next chapter, specific attention to grammatical form does occur in the transcripts of the *Webheads* interaction. However, for a community whose *raison d’être* is language learning, such instances are infrequent. In sum, with reference to the *Webheads* group, a broader view of learning is required than that provided by mainstream SLA.

7.5 Sociocultural perspectives on CMC-based CALL

We now turn to sociocultural perspectives on CMC-based CALL. A perspective in CMC-based CALL research grounded in social theory, which lies beyond the SLA paradigm outlined above, has been invoked as the basis for research into collaborative learning. Within a broad sociocultural approach, the term ‘constructivism’ has emerged as a label for CALL teaching and research which stresses that what is learnt depends in large part on the experience of learning within a particular social environment. Paying attention to the social background of learners is of prime importance when investigating the discourse of communities of learners who are participating in *social* computing. Debski (1997:209) summarises this shift to the recognition of the social in CALL research: ‘CALL theory and practice is ... diminishingly about computers and computer software. Today’s CALL is about how learners can establish optimal relationships between themselves and learning resources via computer-supported media in order to pursue real communicative tasks.’

The notion that interaction in the broader social context is of relevance to learning stems in no small part from Vygotsky’s social theory. Central to Vygotsky’s theory is the view that learning depends to a large extent on socially constituted collaboration between the learner and others. Vygotsky theorised (1962, 1978) that there exists a *zone of proximal development* (ZPD), which he described as being ‘... the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers’ (Vygotsky, 1978:86). If this is the case, the implication for language learning is that collaboration, either among learners or between learners and their teacher, is vital for the learner’s development. Not only this, stressed Vygotsky, but what children can do with assistance (from more able peers or from teachers) is a better indication of their mental development than what they can do on their own (Vygotsky, 1978:85).

Vygotsky’s social theory, while originally applying to child learning and mental development, has also been explicitly addressed in discussion of second language learning by Lantolf and Appel (eds.) (1994), and Lantolf (ed.) (2000). Warschauer (1997) provides a review of computer-mediated collaborative language learning from a sociocultural perspective. Among studies of SCMC-based CALL, a number refer specifically to Vygotsky and the ZPD (Kitade, 2000; Renié and Chanier, 1995; Zähner, Fauverge and Wong, 2000).

7.5.1 Scaffolding

Within sociocultural theory, the metaphor of *scaffolding* has been proposed as an illustration of the way in which mediation occurs in the ZPD. Donato (1994:40) describes scaffolding: ‘... in social interaction a knowledgeable participant can create, by means of speech, supportive conditions in which the novice can participate in, and extend, current knowledge and skills to higher levels of competence.’ Aljaafreh and Lantolf (1994:469) summarise: ‘The idea is to offer just enough assistance to encourage and guide the learner to participate in the activity and to assume increased responsibility for arriving at the appropriate performance.’ As with the problems associated with identifying exactly what constitutes *i+1* (Krashen, 1985), so the definition of *just enough assistance* is equally dependent on the subjective judgement of individual teachers. Wood, Bruner and Ross (1976) are more specific in their proposal of six functions of scaffolded help:

1. recruiting interest in the task
2. simplifying the task
3. maintaining pursuit of the goal
4. marking critical features and discrepancies between what has been produced and the ideal solution
5. controlling frustration during problem solving
6. demonstrating an idealised version of the act to be performed

Collaboration with reference to the metaphor of scaffolding has parallels with the interaction hypothesis discussed in the previous section. Both use as a central image the notion that learners are at a certain place in development and can be drawn into another more developed space, either by input and negotiation for meaning, or by scaffolded help (including, perhaps, input). Moreover, both are concerned with the *task* as the focal learning activity. Sociocultural theory, however, allows us to view language learning as just one part of a learner’s development. In the case of a virtual community such as the *Webheads* group, the concern may equally be how scaffolding aids in the development of the skills of electronic literacy which constitute part of an individual’s electronic communicative competence. In Chapter 8 we investigate scaffolding further with direct reference to data from the *Webheads* transcripts. Below we look at an area in SCMC-based CALL research which is proposed as a measure of collaboration: participation.

7.5.2 Participation and quality of language in SCMC-based CALL

The use of synchronous text-based CMC by language learners on local area networks (LANs), internet relay chat (IRC) and MUDs and MOOs undoubtedly provides them with opportunities for collaboration with peers and others. A preliminary token indication that collaboration takes place is that levels of participation by learners are higher, and patterns of participation are more equal, on synchronous CMC-based CALL sessions in the classroom (often referred to as CACD: computer assisted class discussion) compared with oral classroom discussion. The thrust of numerous studies of CACD is that levels of learner participation online are greater than in equivalent oral classrooms (Kelm, 1992; Chun, 1994, 1998; Kern, 1995b; Sullivan and Pratt, 1996; Warschauer, 1996; papers in Swaffar *et al.* (eds.), 1998; Patterson, 2001; Freiermuth, 2001). A report typical of such studies is made by Sullivan and Pratt (1996) in their comparison of participation during sessions using the LAN SCMC program *InterChange* and during oral classroom discussion. They state (1996:496):

When the discourse of large group discussions ... [was] compared, the patterns of participation differed dramatically. The oral class had only 50% student participation where the computer-assisted class had 100%. ...65% of the turn-taking was attributed to the teacher in the oral class, whereas the teacher took only 15% of the total turns in the computer-assisted class.

An assumption common to all such studies is that increased participation is of unquestionable benefit to language learners. As we have already noted, however, learning through collaboration is not a simple case of increasing levels of participation.

Furthermore, increased participation of learners is often allied with concepts such as freedom, and lack of constraint, and autonomy. Chun, for example, states (1994:26):

'In a "normal" classroom, situations and contexts can be engineered to encourage oral discussion but students are usually told what to talk about and what to ask others in their group. ... With CACD, a general topic for discussion is suggested at the beginning but students have complete freedom as to whom to address, how to take the conversation further, e.g., with follow-up comments or questions, and when to change the subject if they wish.'

Implicit in this commentary on CACD is that learners benefit from a *lack* of teacher instruction: if they are not told what to do, their learning will progress more quickly than if they are told. Does this mean that no teaching is better than any teaching? We could also note that however much students contribute, their errors still need correcting. It seems that when they discovered that students who were silent in the classroom contributed to CACD, commentators such as Chun, in their enthusiasm perhaps, overlooked the issue of the comparability of the spoken and written conversational modes. SCMC is not speaking, as has been made clear throughout this thesis. And just as

spoken discourse should not be seen as a gold standard by which SCMC should be compared, nor should SCMC be considered a preferable mode of communication in the classroom simply because students participate more when using it.

When learners and a teacher are engaged in CACD, the dynamics of the classroom and the role of the teacher are distinctly different from traditional classroom mode. Kern, commenting on the more equal balance of participation between learners and their teacher during synchronous CACD sessions using *InterChange*, notes that it is impossible for any one person, including the instructor, to dominate the session (1995b:444): ‘The instructor has to be willing to give up the authoritative role which usually accompanies class discussions.’ He goes on to list some features of CACD compared with the (evidently more teacher-centred) classroom discussion mode of his study (1995b:470):

teacher control was compromised

students’ reading ability was taxed, due to the speed of the turns appearing on the screen

grammatical accuracy suffers

participation could be anarchistic

discussions seem to lack coherence and continuity

discussions resisted definitive closure

We are by now familiar enough with aspects of discourse coherence and cohesion which allow us to recognise these features of SCMC discourse (see Part Three). The point has also previously been made (in Chapter 6) that participation in SCMC is not conducive to considered reflection (*viz.* ‘think-writing’ [Pennington, 2001]). Kern summarises the effect of using *InterChange* thus (1995b:470):

‘Formal accuracy, stylistic improvement, global coherence, consensus, and reinforcement of canonical discourse conventions are goals not well served by *InterChange*. Conversely, unfettered self-expression, increased student initiative and responsiveness, generation of multiple perspectives on an issue, voicing of differences, and status equalization are supported by *InterChange*.

Aspects of traditional classroom teaching, such as the ability to specify aims and intended learning outcomes with reference to specific language features, do not seem to be either possible or desirable in synchronous CMC used in this language learning context.

Notwithstanding Kern’s comments, we should note that the language produced in computer-assisted class discussion can vary widely across contexts of use. Thus it is important to take into account what kind of participation learners are involved in. This is

exemplified with two stretches of CMC discourse text produced by language learners using synchronous CMC LAN software. Firstly, from Warschauer's (1996) study:

S4: I think both husband and wife should do housework but the husband should pay all the bills too

S3: The wife and the husband both work full time so the wife and the husband should share the bill evenly. However, the husband can do the heavy work since he has the ability of strength. He could do the house works instead let the wife do.

S2: Most of the people believe housework is the type of female, but nowadays since male and female are equal. If the husband and wife are full time workers they should share the housework. If the wife cook then the husband do the dishes. Or perhaps the husband could help the wife be prepared for dinner. In other words, both husband and wife have to share the housework. Men will be able to do everything that women do. For example, clean, cook, wash, take care children.

(Warschauer, 1996)

The learners in this study were enrolled on an advanced ESL composition class at a community college in Hawaii. The language produced, reports Warschauer, was more formal and more lexically and syntactically complex than their spoken language. In contrast, the following exchanges were witnessed by Kelm (1992), who used *InterChange* with his beginning Portuguese class. The text below is Kelm's translation of a stretch of CACD discourse text:

BR: ML, do you like shrimp or lasagne?

ML: BR, I like shrimp and lasagne if they don't have meat. I have begun to eat seafood.

BH: ML, are you a vegetarian? I am, but sometimes I eat fish and shrimp.

MC: BH and ML, I like cheeseburgers too much to be a vegetarian. Do you like them? ML: BH, I like fish too. I wasn't eating well and I decided to eat fish. I don't give enough time to my diet. Do you cook?

BH: MC, I haven't eaten any meat or fish at all for seven years. After a while you lose a taste for it. I don't miss meat, but I always wanted a hamburger, it's American culture

MC: BH, seven years? Why?

... [etc.]

(Kelm, 1992,445-6)

The qualitative differences between the two examples may have been influenced by any number of factors, including level of language, cultural background, familiarity with the technology, task type, knowledge of other students, and so on. The example from Kelm, containing much shorter turns, questions, and direct reference to preceding turns and other participants, is more conversational than the example from Warschauer. There are similarities between the two extracts: turns are not co-constructed; there are more than two participants. These are, however, common to most types of SCMC. To reiterate,

simply ascertaining levels of participation in the discourse only tells us a certain amount about its relationship with collaborative language learning.

Other drawbacks of using SCMC in classroom contexts are noted by Kremers (1993). He discusses his early (1988) implementation of *ENFI* (electronic networks for interaction), a synchronous LAN chat environment similar to *InterChange* developed in the 1980s. He used *ENFI* with a remedial composition group (rather than a language learning group), and although this was largely successful in his terms, he reports a certain ambivalence to its use by students. The *ENFI* class was disorienting in contrast to a normal class; the teacher's role was confusingly ambiguous; the status of *ENFI* sessions (work? play?) was unclear; and *ENFI* sessions had no discernible link to the final exam. Kremers (1993:117) summarised these drawbacks for certain students: '... students felt isolated within the class when they were left on their own because the teacher had always been for them the agent of group cohesion, the arbiter of disputes.' Thus without careful implementation, LAN CALL may well not achieve its pedagogic purpose.

It should be clear from these comments that SCMC sessions on LANs in classroom contexts are not directly comparable to 'equivalent' sessions in face-to-face classroom settings. It is not an intention of this thesis to suggest principles for the implementation of SCMC LANs for pedagogic purposes. However, it seems reasonable to assume that for successful use, teachers need to be aware of the sort of interaction which is successful in such an environment, and that an element of orientation is necessary if students are unfamiliar with the discourse type. It may also be the case that some measure of community identity needs to be fostered if students are to feel the online interaction is worthwhile for their learning purposes (see Salmon, 2000). We now turn to studies of SCMC in international language learning contexts (World CALL) where collaboration is explicitly held to have taken place, and in most cases is held to have benefited learners.

7.5.3 Collaboration and World CALL

Collaboration in synchronous CMC-based CALL between peers, learners of different levels, learners and proficient users of a language (including teachers) and learners of differing cultural backgrounds is often assumed to benefit those learners and aid the language learning process. Studies of learners using a range of SCMC interfaces on the internet reporting instances where collaboration is specifically imprecated as being of benefit to language learning include those by Renié and Chanier (1995); Shield, Davis and Weininger (2000); Kitade (2000); Meskill and Ranglova (2000); Schultz (2000); Zähler *et*

al. (2000); Vick, Crosby and Ashworth (2000); Kotter (2001); Morgan and Carey (2003); and de Souza (2003). In Chapter 8 we make reference to the published literature on the *Webheads* group which also stresses the importance of collaboration in learning. An example of the type of collaborative World CALL project which can be undertaken online, together with its supposed benefits, is provided here by Vick *et al.* (2000). They describe a web-based cross-cultural education project where Japanese and American students used digital video and audio links, text-based synchronous CMC, email and web-page design to develop a multi-modal virtual environment. The project provided students with the opportunity: ‘... to engage in naturalistic communicative interaction that replicated real-life experiences, drew on students’ own prior experiences, exposed them to a target culture, fostered productive management of conflict, and developed decision-making and problem-solving skills’ (Vick *et al.*, 2000:207). The project described by Vick *et al.* involves a great deal of language practice. Yet as with other studies of this kind, there is little reference to language teaching and learning. A pattern in collaborative World CALL projects is that much language practice takes place, though the online environment does not seem to be particularly amenable to actual instruction in foreign languages.

Just as with assumptions previously mentioned that increased participation is beneficial to language learners, so here there is a presupposition that duplication of ‘real life’ problems in a virtual environment will have an advantage for the language learning process. Interestingly, however, the latter group of benefits proposed by Vick *et al.* (exposed students to a target culture; fostered productive management of conflict; developed decision-making and problem-solving skills) are quite general, rather than specific to SLA. We find in Chapter 8 that similar qualities, with a similar general application, could be said to apply to learning in the *Webheads* group.

Allying collaboration with learner autonomy is a feature of studies of CMC use in collaborative learning projects. As with collaboration in general and with participation, learner autonomy is assumed to be beneficial to the language learning process. The nature of learner autonomy in these cases involves the learner being able to gain access to a range of individuals who may help in the collaborative learning process. Shield *et al.* (2000), relating the benefits of learning on a MOO, state that ‘collaboration and learner autonomy are the keys’ (2000:44). They go on to quote Masinter and Ostrom (1993) who stress that a MOO ‘... makes it easy for people to work together. ... When using a MOO, the user is fairly likely to find direct interaction with someone helpful. In addition,

MOO provides a way for people who are simply after the same kind of information to work together to find it' (Masinter and Ostrom, 1993, quoted in Shield *et al.*, 2000:46). Kotter, as reported in his paper (2001), found that collaboration on a MOO was possible by teaming up dyads of German learners of English and American learners of German. The MOO environment, says Kotter, '... provides [learners] with more than just one informant (the teacher) who can illustrate and explain aspects of the L2 in question' (2001:290). A note of caution should be sounded here. If the informants are not teachers, do they explain the aspects of the L2 well or correctly?

One might assume from the literature in this area that the benefits of collaborative projects using CMC outweigh the disadvantages, and it is indeed rare to find reports of instances where collaboration was said to be unsuccessful. Nonetheless it is important to take to task research in the sociocultural tradition for an often blind assumption that collaboration of any kind, and even simple increases in levels of participation, are of benefit to the language learning process. An exception to the trend is central to Kramsch and Thorne's (2002) examination of differing expectations of asynchronous CMC (email) discourse between groups of learners of French (in the US) and English (in France). The authors argue (2002:94-5) that the breakdown in this tandem email exchange was due not to linguistic difficulties but to:

... a clash of cultural frames caused by the different resonances of the two languages for each group of speakers and their different understanding of appropriate genres. ... While the French students write (in English) in the genre appropriate to their institutional status, the Americans write (in French) as autonomous individuals contacting other individuals.

Such a mismatch, according to Kramsch and Thorne, led the French students to regard the American students' contributions as lacking scientific rigour, and the American students to regard the French students' discourse as aggressive and nationalistic.

7.6 Conclusion

In Chapter 7 an attempt has been made to position the type of CMC use under investigation within the wider frame of the use and learning of the English language in the modern world. We opened this chapter with a remark that rather than the computer being considered a tool to learn English, English should be thought of as a tool for being able to use computers and the internet (Warschauer, 2001:4). If this sentiment bears out, the closing comments should perhaps be about the end of CALL. Stevens (2001) makes such a prediction:

What we call CALL is merely a label for the emergence of a tool. When the tool was a novelty and little understood, then it was of interest to refer to CALL. But we are approaching the day when CALL will be seen as a meaningless term. Computers are useful in helping us to accomplish what we have always wanted to do, and they are most useful when they are part of the woodwork.

As with the electric light bulb, explicit attention will only be paid to the computer when it stops working.

Regarding learning, and generally speaking, an important point emerges from the discussions in this chapter. Despite its similarity to spoken language, the status of SCMC is a novel discourse type involving *written* communication in real time. It is quite distinct from prototypical speech, or writing for that matter. As such, it should not be treated as a substitute for speaking in the language learning process.

Aspects of a sociocultural account are taken as apposite explanatory bases for discussion of learning in a virtual community, not least because they allow for a consideration of learning things other than language. Notwithstanding this, the social context which sociocultural approaches claim to take into account must also include the wider questions raised in section 7.2 of this chapter: issues of access and equality, and of English and globalisation.

Characteristic of both the SLA and the sociocultural approaches to language learning is a focus on the ‘task’. This word as used in language learning and research is variously taken to be a term for a meaning-focused language learning activity (Ellis, 2003:16), an element of experimental design (Crookes and Gass, 1993:1), or simply a ‘particular activity or piece of work undertaken for oneself or for others, freely or for some reward’ (Long, 1985:89). Much of the interaction in the *Webheads* group is not focused on a specific language learning task by any definition at all times, as we saw in Chapter 4.

In Chapter 8, when we discuss the various functions of written interaction with *Webheads*, we see that most interaction cannot be considered to relate to language learning in either a form-focused or a meaning-focused sense at all.

Chapter 8. Learning and SCMC discourse

8.1 Introduction

This chapter is concerned with aspects of learning in the *Webheads* community. Specific attention is paid to learning which takes place within the text-based SCMC forum of *Webheads*, though reference is made when necessary to the eclass, the learners' individual web pages, and to voice and video SCMC. Learning with *Webheads* is not restricted to conventional language learning, or even to language learning at all. As with a number of collaborative World CALL projects of the type mentioned in Chapter 7, section 7.5.3, the concept of *learning* also encompasses the development of the technical and discourse skills of electronic literacy, hence the development of a measure of communicative competence.

There are four further sections in this chapter. Section 8.2 has as its focus the individual participants' perceptions of learning with *Webheads*. Reference is made to previously published papers and other literature on *Webheads*. In this section we aim to ascertain how individual members of *Webheads* – learners and tutors – assume membership of the group serves learning, and on what basis.

The next two sections (8.3 and 8.4) concentrate on the areas of learning with *Webheads* which most closely resemble conventional form-focused language learning. In section 8.3 we investigate the discourse activity surrounding learners' requests for clarification, the major explicit language learning activity with *Webheads*. In so doing, we identify a novel technique for requesting clarification which is specific to the text-based SCMC medium.

Section 8.4, entitled *Error correction and repair*, concerns not only the *Webheads* tutors' corrections of learner errors, but broadens the scope to include discussion of self repair. Grammatical and orthographical accuracy, prescriptivism, and the use of linguistic features characteristic of SCMC as markers of group membership, are all considered here.

Section 8.5 details how *Webheads* supports learning of a different kind. In this section we analyse the textual record of collaboration in the development of the skills related to electronic literacy. Two facets of such skills are handled here: learning to manage the discourse of SCMC, and learning the technological skills involved with successful participation in SCMC.

8.2 Participants' perceptions of learning with *Webheads*

This section asks two questions: What do learners with *Webheads* perceive the benefits of participation to be? What pedagogic principles do the tutors invoke when describing and justifying their approach to tutoring with *Webheads*?

Reference is made to previous studies of *Webheads*, in particular Bicknell (1998), Steele (2001), Coghlan and Stevens (2000), and a number of related reports by Stevens (2000a, 2000c, 2000d, 2000e).

The reports cited as Stevens (2000c, d, and e) are the results of an informal survey carried out by Stevens and Coghlan in early 2000 via the *Webheads* email list or *e-class* (see Chapter 2 for a description of this forum), based on the responses of eleven learners with the group. The survey was administered in three parts: an initial exploratory questionnaire asking what was important to learners about the e-class (Stevens, 2000c); a questionnaire requiring learners to rank 15 statements about *Webheads* in order of importance (Stevens, 2000d); and a questionnaire containing a number of questions requiring open-ended responses (Stevens, 2000e). The second of these documents, the ranking questionnaire (Stevens, 2000d), was flawed in its design and confused in its analysis and discussion, and the results gathered there do not form part of this discussion. The qualitative responses from the other two documents do, however, contain revealing responses. This is despite the survey concerning primarily the e-class (rather than the synchronous CMC meetings), and the self-selecting respondents representing only a very small fraction of the total number of recipients of the email in the e-class.

8.2.1 The learners' perspectives: *Benefiting from Webheads*

The third questionnaire in the survey described above (Stevens, 2000e) asks: 'Why did you join *Webheads*?' Of the eight responses, six explicitly stated that the primary wish was to improve their English; for a seventh, this wish was implicit ("Because I knew my English very bad, because of that I want to learn English").

From this general wish to improve English which provides the impetus to join, the learners' perception of how they benefit from continued *Webheads* membership introduces a broader range of responses. These are grouped around the following themes:

- they can practice English

- this practice is free in terms of time and money
- they can improve their writing by having it corrected by teachers
- they can communicate with other participants from many linguistic backgrounds
- they have developed international friendships and a sense of community.

We discuss each in turn.

English language practice

A major perceived benefit of *Webheads* membership and interaction is that it provides an opportunity for practising English. Stevens (2000c) reports a student, Valentin: ‘... if the pupils are in the e-class it is just because they want to learn or they enjoy practising English.’ In the same document, Ying Lan states: ‘“Practice makes perfect” is not only a sentence but also a truth. ... The more we write and the more we write better.’

Those comments concern the e-class, which utilises asynchronous CMC. Steele (2001: chapter 4) mentions that according to one of his informants, the synchronous CMC chat sessions: ‘... allow for a type of practice that is impossible in an asynchronous class.’ He does not, however, elaborate on the nature of the practice, nor that it is practice in a discourse type – SCMC – which is distinctly different from any other.

Classes are free

That this English language practice is free in terms of time and money is also perceived to be of benefit. The student Denilson (in Stevens, 2000c) mentions as a positive aspect of membership: ‘Free website :)’, that he has: ‘learned a lot, ... made friends, and it’s free. ... It’s a great opportunity to learn English without expending money.’

For others, the attraction is the freedom from time restrictions in the group interactions. Choi (in Stevens, 2000c) notes that one useful aspect of the *Webheads* class is that there is: ‘No participating time limit.’ The time taken to participate in *Webheads* interaction is nonetheless constrained in some ways. In an asynchronous email forum, the amount of time taken to compose or respond to a message is potentially unlimited, although some participants comment favourably on the rapid response to their messages. For example, Ying Lan, in Stevens (2000c) says: ‘The most useful of the Webheads class is teachers could correct my story quickly’. In text-based SCMC there is some imperative to post a turn, though, as we saw in Chapter 5, this pressure is not so great as it might be in

spoken conversation. The *Webheads* synchronous sessions are scheduled to take place for an hour, but frequently start early and finish late. In this sense there is 'No participating time limit'.

Improvement of writing through correction

This refers primarily to *Webheads* members who send their emails to the e-class, which are then corrected and posted on students' individual websites. As Choi puts it (in Stevens, 2000a): 'It is a bit easier to learn vocabulary and grammar but very difficult to study Writing. For this I am so happy to have Vance, Maggie, and Michael [the *Webheads* tutors] to correct my writing. It really helps me enhance my writing a lot.' Earlier, she wrote (in Stevens, 2000c) that the most useful thing about *Webheads* membership was to: 'Get correction on what I have written.' Ying Lan concurs most emphatically (Stevens, 2000c): 'We could find a lot of English grammar books in bookstore, library and other websites. But only Maggi, Michael and Vance could give us response fast. That's our Webheads wonderful treasure. I can not find such good precious pearl in the world except Webheads.'

Moral notes how he benefits from interaction with native English speaking teachers (Stevens, 2000c): 'My writings can be corrected by the 3 native English speakers who are professional ESL teachers.' Ming states that the one thing she enjoys most about the class is that she can: 'read the revised writing and admire those people who did (modify) it.'

The concern which learners with *Webheads* have with 'correctness' and accuracy is in discord with the tutors' approaches to language learning and teaching, as we see later in this section.

International and intercultural communication

The sense that interaction in *Webheads* takes place between individuals from a range of backgrounds – linguistic and cultural – is clearly beneficial in the eyes of a number of participants. Denilson's 'positive' points about *Webheads* include: 'Get to know people from all over the world' and 'General culture, exchange' (Stevens, 2000a). Cultural exchange is important for Felix and Maggie as well: 'Getting to know different cultures using English as the base language' (Felix, in Stevens, 2000c); 'Knowing customs of different countries' (Maggie, in Stevens, 2000c). The fact that communication is international and intercultural is linked to the creation of international friendship ties.

International friendships and community

Many learners with *Webheads* comment that membership of the group allows them to make friendships. Such remarks are often accompanied by comments relating to the international nature of these friendships. It is sometimes also noted that a sense of community is developed. For example, Maggie (in Stevens, 2000c) states that what she likes about the class is: ‘making friends with different teachers and students from different parts of the world.’ And Gloria (in Coghlan and Stevens, 2000) makes the point that online communities can be real in the eyes of their members: ‘You [teachers] have encouraged us to become this virtual community, but it’s not that virtual since Webheads has become a real part of our lives.’

The open-ended responses to the question ‘What is the ONE THING you enjoy most about the class?’ (question 2 in Stevens 2000e) gathered the following responses:

Friendships (Ying Lan)

I can make friend all over the world. (Mari)

I like to talk to everyone in this class, and they come from different country ... The aim for me to study English is to communicate with other person. The Webheads class give me a good chance to meet many friends from different places. (Eileen)

Ying Lan, whose interactions we have considered in some depth at various points in this thesis, is single, in her thirties, and lives in urban Taipei, Taiwan. Here (in Stevens, 2000c) she notes some advantages of belonging to an online community of learners:

I am single and live with my parent. Most of my classmates married and have their own families. Except my family and officemates, I hardly talk to strangers. I don’t think I am lonesome, but I am always alone in my life. When Vance said I was a regular volunteer to go our Sunday class, I was only smile and kept silence. To be honest, I just have no place to go on weekend.

The perceived benefits of interaction in the *Webheads* group are thus many and varied.

Felix (in Stevens, 2000e) summarises the benefits from his point of view thus:

It helps me a lot. When I have a doubt I turn on my computer quickly and send Webheads teachers an e-mail and the cool part is that I get the response in a flash. In Webheads I’ve learned so many things like behaviour, culture around the world, new words, expressions to name a few. And what it’s wonderful about our community is that we can learn the things I mentioned above in English, that way we are “killing the rabbits with the same bat”.

8.2.2 The tutors’ approaches to language learning with Webheads

Learners’ perspectives on *Webheads* are not uniformly positive. Suggestions for improvements to the class elicited in the first questionnaire described above (Stevens, 2000c) and also reported in Stevens (2000a) centre around a perceived need for more, and more formal, instruction. Denilson, for example, states that for him, negative aspects are:

- We don't have a syllabus to follow
- We don't know, what will be the next step
- We don't have exercises

In the same thread of exchanges, Deden notes:

'I think you are right Denilson. We don't have a method, a syllabus to follow, or exercises – and sometimes I don't know what I have to do on the mailing list. ... I hope Vance and all of our teachers can make some method to help us to learn English better.'

This concern with learning and methodology prompted a discussion between learners and tutors in the e-class which was then reported as 'Writing for Webheads: Our Methodology' (Stevens, 2000a). A further paper (Coghlan and Stevens, 2000) gives greater insight into the tutors' perspectives. On the basis of these contributions we can gain some idea of the tutors' approach to language learning and language teaching with *Webheads*. The term 'approach' is used here in Anthony's ([1963] 1972) sense, whereby:

An approach ... [is] a set of correlative assumptions dealing with the nature of language and the nature of language teaching and learning. An approach is axiomatic. It describes the nature of the subject matter to be taught. It states a point of view, a philosophy, an article of faith ...

A natural approach

In Chapter 2 the origins of the *Webheads* group were described. We noted that it was started by Vance Stevens, who was later joined by two other tutors, Maggi Doty and Michael Coghlan. Statements by Coghlan and Doty suggest they subscribe to an approach commensurate with some of the theoretical bases of the 'Natural Approach' to language acquisition (Krashen and Terrell, 1983). For example, Michael [Coghlan: in the papers, all participants are referred to by their given names] gives the following advice about language learning:

In a way it doesn't matter how you do it as long as you are 'taking in' language regularly – preferably every day. The best way of course is to have an English speaking girlfriend or boyfriend, but a neighbour or good friend is also good. Or to have a job where you have to use English every day. ... And as I often tell my classes,

- if you want to learn how to speak English, speak English;
- if you want to learn how to write English, write it;
- if you want to learn how to read English, read it;
- if you want to learn how to listen to English, listen to it!

(Coghlan, in Stevens, 2000a)

The following exchange of emails between Felix and Maggi in February 2000 encapsulates a mismatch of approach between the tutors and the learners (quoted in Stevens, 2000a). The first email is from Felix, a learner with *Webheads*, and a teacher of English in Brazil. He suggests there is 'something missing' from the *Webheads* e-class:

I do like the classes here, but as you said, it's missing something. I think learning a language involves many things, and we are getting to almost everything. But it's still missing something... Who knows if it's grammar topics, or exercises, or anything like that?

The response of Maggi [Doty] poses questions from which we may infer that she believes acquisition, placed in opposition to the formal learning of grammar, is the key to learning:

Too many people think grammar is how you learn a language, but think about how you learned to speak your native language ... did your parents teach you grammar?

You could speak the language before you went to school. How did you learn it?

This statement accords with Krashen's distinction between language *acquisition* and language *learning*, and the importance he places on language acquisition in the development of language competence. In his explanation of the language acquisition/language learning hypothesis, Krashen defines acquisition thus (1982:10):

The first way [that adults develop competence in a language] is language *acquisition*, a process similar, if not identical, to the way children develop ability in their first language. Language acquisition is a subconscious process; language acquirers are not usually aware of the fact that they are using the language for communication.

Maggi's view that 'too many people think grammar is how you learn a language' is also in harmony with Krashen's opinion that the formal study of grammar is not a necessary part of the language acquisition process. Here (1982:120) he responds to teachers and students who claim that language learning takes place in a grammar class:

[They] believe that it is the subject matter itself, the study of grammar, that is responsible for the students' progress in second language acquisition, but in reality their progress is coming from the medium and not the message. Any subject matter that held their interest would do just as well, so far as second language acquisition is concerned, as long as it required extensive use of the target language.

There is not space here for an extended critique of Krashen's views on language acquisition/learning and their (partial) adoption in the *Webheads* group. It certainly seems, however, that his ideas have currency among the tutors of *Webheads*.

Community and learning

An approach is inferred from comments by Stevens and Coghlan, whereby the *Webheads* group is presented as an opportunity for language practice within a community. Stevens (2000a) presents his views on the importance of practice:

... Language is a skill. You can only learn so much of a skill through studying ABOUT it. Mainly you have to DO it, practice it over and over. That is how you acquire any skill. To learn the skill, the practice is more important than the rules (of grammar, for example).

It is then suggested that tutors in the *Webheads* group provide the basis of a community within which members can practice their English language skills in a meaningful – a 'real' – way (2000a):

We give you opportunities to use and practice your English skills. Language is communication, so we also give you real reasons to communicate. All of us in this community, the teachers and learners, give you an audience. We are interested in what you have to say and we encourage you to say it. Eventually you come to like the others in the community, and it's interesting to get to know them. You want to communicate with them and you want them to communicate with you. So you have real reasons to write and speak to them.

Coghlan links the concept of community to Krashen's affective filter hypothesis

(Krashen, 1982 *inter alia*). In Coghlan and Stevens (2000) he states:

It has become clear that the success of online learning programs hinges in large part on how well they cater for the affective needs of students. The Affective Filter Hypothesis – that people acquire a language better when they are motivated and have a good self-image and low anxiety ... – can be applied equally well to all learning in the online environment, and being part of an online community can satisfy many of these affective needs.

Tying interaction with *Webheads* to the affective filter hypothesis can be viewed unsympathetically as an attempt to confer theoretical legitimacy upon the group.

Although there is little doubt that the affective variables mentioned by Coghlan and Stevens (motivation, self-image and low anxiety) contribute to language learning, the extent to which they together comprise an affective filter is more doubtful. Mitchell and Myles (1998:39) ask: 'How does the Affective Filter actually work? ... these issues remain vague and unexplored.' McLaughlin is particularly trenchant in his criticism (1987:56):

The Affective Filter Hypothesis is also of questionable validity because Krashen has provided no coherent explanation for the development of the affective filter and no basis for relating the affective filter to individual differences in language learning. The hypothesis is incapable of predicting with any precision the course of linguistic development and its outcome.

Coghlan's concept of community nonetheless includes a strong emphasis on factors which he suggest together comprise an affective filter: motivation, self-image and low anxiety. In Chapter 2 we discussed criteria for claiming that the *Webheads* group is a community, and included a comment on Coghlan's criteria. Amongst these are the following (Coghlan and Stevens, 2000):

- Students care about each other
- People make friends in the class
- Students and teachers are friends

He also states that: 'The emotional lynch pin of the [Webheads] community is the commitment and warmth of its participants.'

Coghlan's views have echoes of a tradition which is sometimes described as a 'humanistic' approach to language teaching. According to Moskowitz (1978:2), awareness exercises employing humanistic techniques: 'help students to be themselves, to accept themselves, to be proud of themselves ... Use of awareness exercises will help foster ... a climate of caring and sharing in the foreign language class.'

One language teaching ideology which can be described as ‘humanistic’ is *Community Language Learning* (Curran, 1976; La Forge, 1983). Some salient features of this approach have a certain resonance in the activity of *Webheads*. As summarised by Nunan (1989:194–5) Community Language Learning employs no set syllabus; the syllabus emerges from learners’ intentions and the teacher’s reformulations. Course progression is topic based, and learners provide those topics. Furthermore, learners are seen as being members of a community. By extension, therefore, learning is not viewed as an individual accomplishment, but something that is achieved collaboratively.

In sum, *Webheads* as perceived by its founder and tutors does not provide courses of instruction but is an online community where provision is made for practising language skills. In the remaining sections of this chapter, the focus is on the types of learning activity which occur in *Webheads*, starting with occasions when learners raise language learning questions.

8.3 Learners’ requests for clarification

It might be expected from the previous section that there is little or no interaction in the *Webheads* SCMC sessions which resembles language teaching of any conventional kind. Indeed, as has been stressed above and throughout this thesis, *Webheads* is not primarily a site of English language instruction. This is partly, it seems, because of the approaches to learning and teaching to which the tutors subscribe, and the ways in which these approaches are reflected in the interaction in the e-class and the SCMC sessions. We focus in this section on an analysis of printouts of data logs from early SCMC sessions. Examples here derive from the first ten SCMC logs (S001 – S010), recorded between October and December 1998 at the MOO *The Palace*. On occasion they do contain instances of what might be described as ‘language teaching’. We concentrate on such instances in this section. They are identifiable because they occur when initiated by a learner with the group, and are defined broadly as *learners’ requests for clarification*.

Commensurate with the approach to language learning and teaching expressed by the *Webheads* tutors as described in section 8.2.2, very little explicit language instruction initiated by tutors is carried out in the SCMC forum. However, as Stevens (2000a) notes, tutors do respond to learners’ requests for clarification.

The first set of examples, 8.1-8.4, show how a learner's question about vocabulary is addressed in two-party SCMC. In example 8.1, Vance uses the US English slang term 'bummer', then responds to Brazil's query:

(8.1)

Brazil: i canceled it
Vance: It must have got stuck again.
Vance: bummer
Brazil: i will send it through e-mail.
Brazil: what is bummer?
Vance: That will work.
Vance: Hard to explain ... it means "too bad"
Vance: A bum is a person who lives off the street.
Vance: To bum means to beg, like to bum a cigarette
Brazil: it's a slang right?
Vance: Bummer means out of luck, too bad.
Vance: Yeah, it's slang.

Some turns later, Brazil uses the term correctly ... :

(8.2)

Vance: We have machine's connected to the Internet all over the place but we can't use chat lines.
Vance: Firewall
Vance: bummer
Brazil: you have already told me that..
Brazil: bummer
Vance: We HAD the connection .. remember when we were going to put you in touch with our students?
Brazil: yeah, i remember that
Vance: That same week, the firewall was put in place.
Brazil: bummer

... and incorrectly:

(8.3)

Brazil: your boss is a bummer....
Vance: He's not my boss. He's our network administrator.

Finally, Vance uses the term himself, perhaps in an attempt to model the correct use of 'bummer' for Brazil:

(8.4)

Brazil: right.. vandals.. They buried it..
Brazil: the end of the pier was a gathering place for teens.
Vance: Burned it? Or buried it? Did they object to teens gathering there?

Brazil: We use to go there walking and at the end of it we sat
and jum into the sea
Brazil: burned
Vance: bummer

In some cases, a learner's request for clarification is engineered by a tutor when the tutor employs a phrase which he or she thinks the learner will not understand. In this example, Ying Lan is describing to Vance how she went on a date with a man she did not like:

(8.5)

1 Ying-Lan: ^I think it is very stupid.
2 Vance: So he didn't appeal to you?
3 Ying-Lan: ^I have no idea about the man.
4 Ying-Lan: ^What does the appelea mean?
5 Vance: If he "appeals" to you, then you might want to
meet him again.
6 Ying-Lan: appeal

We might tentatively suggest that Vance's use of 'appeal to' in turn 2 was possibly prompted by a wish to introduce the phrase to Ying Lan, whose question in turn 4 then gives Vance the opportunity to provide an explanation. Turn 6, appearing out of place as a result of disrupted turn adjacency (see Chapter 5) is a self repair by Ying Lan of her spelling mistake in turn 4 (see section 8.4 below).

When requesting clarification, Ying Lan often employs a technique specific to SCMC discourse. She copies the relevant problematic utterance into the text buffer, pastes it into the frame on the screen where she composes turns, then sends it as her own turn. This can be seen in example 8.6 below.

(8.6)

1 Vance: Maybe we speak the same language, it just comes out
differently in dfferent places.
2 Vance: People are basically the same with the same desires
and pains.
3 Ying-Lan: ^" it just comes out differently in dfferent
places."
4 Vance: I mean, we want to say the same thing, we just say
it in different ways.

In turn 3 Ying-Lan repeats Vance's second clause of turn 1 to send as her turn. We can infer that she uses the copy and paste technique, rather than simply typing the relevant words, as the spelling mistake 'dfferent' occurs in both Vance's turn and hers. In this instance, Vance responds by rephrasing the sentence (turn 4).

Ying-Lan is the only learner to employ this technique. The tutors nonetheless seem to know that she requires clarification when doing so. In example 8.7 she repeats just three words, 'in the flesh'. Even so, Vance responds with a clarification of Maggi's utterance:

(8.7)

Maggi: only a mystery in that we have not met in the flesh...
Ying-Lan: in the flesh
Vance: But you have perhaps met in cyberspace?
Maggi: funny, that is what we thought too!
Maggi: but a blind date means you know nothing about the person beforehand...
Vance: I think by "in the flesh" she means "in person" (let's hope)

In the next example (8.8), she only repeats one word, which acts as a signal to Vance that she requires clarification:

(8.8)

1 Vance: Yeah, although for an Arab country, it is very liberal.
2 Ying-Lan: but I hate someone involve my life.
3 Ying-Lan: liberal.
4 Vance: Do you and your uncle think alike YL?
5 Vance: Yeah, liberal means the opposite of conservative.
6 Vance: Liberal means free-thinking; conservative is orderly and business-oriented.
7 Ying-Lan: ^No, I
8 Vance: Liberal is new ways and changes ... conservative is old ways and traditions.
9 Ying-Lan: ^I am a liberal... hate to bound by old thought.

Vance uses the word *liberal* in turn 1. Ying-Lan then repeats the word in turn 3. Vance's explanation comes in three turns (5, 6, and 8). Ying Lan then writes the word in a turn of her own (turn 9), perhaps suggesting that she is attempting to learn the word by using it herself.

The final two examples in this section remind us that the distinction between learners and tutors in *Webheads* is blurred. In each case, a learner, Felix (also known as Brazil), adopts a tutoring role to teach an item of SCMC jargon. In the first example, Vance and Felix are in conversation, when Vance asks Felix the meaning of an item of internet jargon he has used twice in four turns:

(8.9)

Felix: My wife is a nice girl... I dont know how she can stand me.. ROFL

Vance: Yeah, same for my poor wife
 Felix: i have a temper Vance.... And she deals with it very well.
 Felix: .
 Vance: It looks like she knows what to do with you when you show your temper.
 Felix: yeah... She learned the lesson.. ROFL
 Vance: What's ROFL?
 Felix: rolling out on the floor laughing

In the final example, Brazil (Felix) uses the abbreviation *ppl* for *people*. Ying-Lan asks him the meaning of the expression, and Brazil provides an explanation:

(8.10)

Brazil: What is all your talk about ppl ?
 Maggi: Felix you are NOT fat!!!!!!!!!!
 Gosia: what a nice atmosphere !!!!!!!!!!!
 Ying-Lan: ^What is ppl?
 Brazil: Mad if i sit on your legs you will not say that .. LOL
 Brazil: ppl short for people

It must be stressed that the examples in this section derive from very early interactions in the *Webheads* SCMC forum. The number of participants is very small: only two learners (Brazil and Ying Lan) and two tutors (Vance and Maggi) are involved. Furthermore, the interaction takes place in the first few months of interaction in SCMC with *Webheads*, at a time when participants – tutors and learners – were possibly unfamiliar with the discourse type. In the later logs collected for this thesis, the focus relating to language learning was on exploring the potential of voice and video CMC tools in online exchanges between classes of students. Nonetheless, learners' requests for clarification continue throughout the series of data collected for this study, and are at times the only indication in the text of the interaction that *Webheads* is a site nominally dedicated to language learning.

8.4 Error correction and repair

Some interaction in the early SCMC sessions with *Webheads* comprises error correction of various types, representing the second main language learning activity in the text-based synchronous CMC forums of *Webheads*. We should note at the outset that the focus here is on the nature of the correction, or the *repair*, rather than that of the error itself. Two kinds of repair are exemplified here: other repair, which can occur alone or accompanied by some sort of explanation; and self repair.

Other repair and self repair are treated together in the literature of conversation analysis and pragmatics. For instance, Schegloff, Jefferson and Sacks (1977) group other repair and self repair of errors in the same system. Levinson also subsumes ‘correction’ under the more general heading of ‘repair’, a concept which includes: ‘... word recovery problems, self-editings where no discernable error occurred, correction proper (i.e. error replacements) and much else besides’ (Levinson, 1983:140). Widdowson (1984:115) refers to *reparatory utterances*, which are: ‘... required to correct the course of an interaction, to clarify misunderstandings, to counter unforeseen reactions, and so on.’ Here we consider other repair and self repair somewhat separately. Other repair is a language teaching technique with *Webheads*, whereby tutors identify learners’ errors as they appear in the text and correct them in various ways. Inevitably, the question arises of how errors are identified for correction, raising questions of prescriptivism in SCMC discourse. In the second part of the section on self repair, such issues are considered in relation primarily to the use of standard forms in an online language learning community.

8.4.1 Other repair

In response to a question about the methodology employed by *Webheads* tutors, Stevens (2000a) states: ‘We don’t focus on grammar at all unless a student specifically asks about it, and then we comply. Sometimes in our chats we echo in correct English and the students often pick up on this ...’. *Echoing* is more usually used as a term used for repeating the error back to the learner (Bartram and Walton, 1991:51). But like the description of correction by Stevens, it is also a type of *other repair*.

The purpose of other repair in this first set of examples (8.11-8.15) is both to correct the error and prompt the learner into repeating the correct version. This repetition by the learner is sometimes, though by no means always, done. In example 8.11, Vance corrects Brazil by other repair:

(8.11)

Brazil: that`s right Vance... Primarily closed-caption were created on Tv to help death people. But now lots of English students are using it..
 Vance: It's the law in the USA that tv's sold there have to have the closed-caption decoder
 Ying-Lan: ^Have you seen a movie called "Antonia's Line"?
 Vance: deaf people

The repair can be incorporated into a ‘normal conversation’, as in example 8.12 below when Vance includes the place name *Amsterdam* with the correct spelling in his turn. The reason for doing this is possibly based on an assumption similar to that expressed by Edge (1989:47): ‘It is important ... that the teacher says these things naturally, not like a correction. Learners need to feel that they are involved in a conversation in English, not another exercise.’

(8.12)

```
Ying-Lan: ^First I was in Amerstand and to Stockholm
Vance: Didn't they check your passport in Amsterdam?
Ying-Lan: ^I went to Stockhom via Amsterdam.
```

In the following example, 8.13, the repair of Brazil’s error by Vance is included in a turn with two functions, separated by the use of suspension dots, the use of which was described in Chapter 5 as a cohesive device characteristic of SCMC. Firstly the repair is made, then the conversation is continued with an initiating question:

(8.13)

```
Brazil: I see. but you really dont know my wife.. She is so
protectin with kids... she doesnt let them breath....
Brazil: WOW
Vance: Protective of the kids ... has she traveled?
```

We recall discussion of the same device being used in Chapter 6, where it was related to abrupt topic shift. Here, however, Vance returns to the original topic after the correction and the suspension dots.

In the next example, 8.14, Vance employs another device specific to SCMC discourse, the ‘whisper’ command, to correct Ying Lan’s turn. During the interaction, only the addresser and addressee can view a turn sent as a ‘whisper’. Use of the whisper command, described in Chapter 4, is evident in the logs from the MOO *The Palace* when the sender’s name is prefaced and followed by asterisks. Here, Vance whispers the correct preposition to Ying Lan:

(8.14)

```
Ying-Lan: ^Maggi, are you in your vacation?
Ying-Lan: ^You have not to work tomorrow?
Maggi: No, I have class all morning tomorrow Ying...I met him
in ICQ...
* Vance * on vacation
* Vance * I was having trouble whispering
```

In this final example of correction by other repair alone, 8.15, the learner Ying Lan and the tutors Maggi and Vance are in conversation. Ying Lan's error *pool/poor* is repaired by both tutors. Maggi's repair is again included in a turn with two functions, separated by suspension dots in the same way as Vance's turn in example 8.13 above:

(8.15)

Ying-Lan: ^The rich is getting rich. The pool is getting pool.
Maggi: poor Ying...but that happens in democracies too Ying...
Vance: (The poor are getting poorer)

Incidentally, this is an error which may be due to first language interference. Chang (1987:227), in her classification of some problems which Chinese learners of English have with spelling, notes that some errors: '... result from learner's incorrect pronunciation' (1987:227).

Corrections with explanation

Here we examine two examples of other repair which are accompanied by some sort of explanation to the learner.

In example 8.16, Ying Lan greets Maggi in turn 1, who corrects the greeting formula with an explanation in turn 3. There is a certain ambiguity here: it is not clear whether 'Nice to see you' in turn 3 is intended as a response to the greeting in turn 1 or as an instance of other repair. Ying Lan then reproduces the correct version in turn 6.

(8.16)

1 Ying-Lan: Nice to meet you.
2 Vance: Hi MAD. I was expecting a whole LOT of students, but at least Ying-Lan is here.
3 Maggi: Nice to see you...meet is used only for the first time...
4 Ying-Lan: ^Snow covers your land
5 Maggi: Parts of it...but it should snow tomorrow...
6 Ying-Lan: ^Nice to see you.

In 8.16, the correction seems to have been successful, resulting as it does in the posting of a modified utterance by Ying-Lan. However, on occasion the explanation seems to confuse the learner, as in the following example, 8.17.

(8.17)

- 1 Vance: I'll be right back ...
- 2 Ying-Lan: I wait ...
- 3 Vance: OK, I'm back.
- 4 Vance: I'll wait (grammar correction)
- 5 Ying-Lan: You wait what?
- 6 Vance: You will wait for what? << I'm echoing correct English back to you.
- 7 Ying-Lan: ^Echo?
- 8 Vance: An echo is, like if you stand on a mountain and shout, and you hear yourself shout back.
- 9 Ying-Lan: ^You mean you are waiting my sotry?
- 10 Ying-Lan: story
- 11 Vance: No, you said, "I wait". I echoed back "I'll wait."
- 12 Brazil: @64,64 !It's Brazil
- 13 Vance: I didn't mean to say it myself. I was just helping your English.
- 14 Ying-Lan: ^But you said "you'll wait correction..."
- 15 Brazil: Good morning, afternoon oe evening whatever it is for you
- 16 Ying-Lan: I appreciate your help.

Here, Vance in turn 4 posts a correct version of Ying Lan's turn (2), accompanying it with the words 'grammar correction'. The intention is unclear to Ying Lan: Vance wishes to signal that the utterance is a repair, rather than a declaration, though Ying Lan fails to understand this. There follows an explanation of the technique which Vance calls *echoing* (turns 6-11, 13-14). Ying-Lan does not know the word 'echo' (turn 7), which then prompts another level of explanation. The entire episode is possibly unsuccessful from a language learning point of view, to judge from the ambivalent remark from Ying Lan (16).

This brings us to consideration of problems with error correction in SCMC discourse. These are in part similar to difficulties encountered when teachers attempt to correct errors in learners' spoken discourse. In second language acquisition research, error correction is also referred to as *negative evidence*, which Gass and Selinker (1994:214) define as: 'information provided to a learner that her or his utterance is deviant in some way.' In their view, error correction is inadequate as a language teaching technique for three reasons (Gass and Selinker, 1994:214):

1. Corrections cannot occur with all incorrect forms;
2. Many errors are errors of interpretation;
3. Error acknowledgement does not provide enough specific information to tell the learner exactly where the error is.

With regard to the first point, we have already seen that tutors with *Webheads* are somewhat selective in which errors they choose to repair. In example 8.15, for instance,

both tutors concentrated on the pool/poor distinction, possibly because it was the most striking error in the sentence. Like many errors which attract attention, it is vocabulary-oriented. However, Ying Lan made what might be considered two other errors in the turn: she used the third person *singular* rather than *plural* form of the verb ‘to be’, and she also failed to use the comparative adjective (‘the rich *is* getting rich[er]. The pool *is* getting pool[er].’).

The second point, that many errors are errors of interpretation, is exemplified by instances where learners do not notice they are being corrected, or at least do not respond to the repair in any way. In example 8.18 Vance’s repair was possibly intended as a correction; however, Brazil seems to interpret it as an initiation requiring an appropriate response:

(8.18)

Brazil: No, I am so sleepy anymore..
Brazil: YEs, a long time i dont come here.
Vance: You are not so sleepy any more?
Brazil: not now

The third point, allied to the second, can potentially be seen in all instances where the learners fail to acknowledge the repair: that is, when they do not repeat the correct form.

It is suggested that these points were accepted by tutors with *Webheads* early in the history of the SCMC sessions. The instances of error correction outlined above derive from the first ten logs of SCMC discourse text (S001 – S010). In the last ten logs (S141 – S150) no instances of other repair, with or without an accompanying explanation, could be identified.

However, because the discourse is mediated via computers, there are two possible, and related, further explanations for the drop in number of instances of error correction between the early and the later logs.

1. Tutors with *Webheads* acknowledge that SCMC discourse as engaged in by participants in the *Webheads* community is flexible with regard to rules of grammar, spelling and punctuation.
2. CMC discourse in English, both asynchronous and synchronous, does not necessarily conform to a particular standard or variety of written English. This is not to say that all written discourse mediated by computer is non-standard (in written terms). Rather, when unorthodox or non-standard forms are used, they are tolerated. Thus it is not feasible to

be prescriptive regarding CMC discourse. In fact, prescriptivism is rife on the internet in the form of style guides (Crystal, 2001:65-81). However, such advice tends to stress the desirability of a *lack* of correct grammar, spelling and punctuation. The identification of errors, and the differentiation between errors and intended postings, therefore becomes problematic for an online tutor.

8.4.2 Standards and self repair

In SCMC discourse in general, standard spelling and punctuation is not seen as necessary. In this sub-section, we demonstrate that the level of accuracy is higher, and the use of SCMC-specific forms lower, amongst established members of the *Webheads* group than in much other SCMC discourse. A preliminary example concerns capitalisation and punctuation. In some IRC rooms there is an almost complete lack of capitalisation and punctuation. The examples here (8.19 a-e) are from a variety of chat rooms.

(8.19)

- a RosaryMan : i was cut off from server
- b Igor_UrIsRU : think tat is enuff for now
- c midnitediamond : no how u feel rose
- d Hed Planet Earth : get ya nickers off
- e The_Toffeeman0 : i wonder if me boss was slagging me off 4
 staying off

There is a sharp difference between the turns above and turns from *Webheads* SCMC discourse, which are often meticulously punctuated and error-free. The extracts here (8.20 a-c) show the care often taken with punctuation:

(8.20)

- a VanceS says, "Hi everyone. I think Lian and John are around
 too."
- b JohnSte says, "Sorry I couldn't make it to your presentation-it
 was 4:00 am here."
- c VanceS asks, "We have a guest, Dianne. Did you come for our
 meeting, Dianne?"

Among established *Webheads* members there seems to be an imperative to produce accuracy in turns in SCMC discourse. Errors are often subject to self repair. The following group of examples (8.21 a-e) show different ways spelling mistakes and typographic errors are repaired by *Webheads* members (apart from Ebony, all participants here are established *Webheads* members):

(8.21)

- a VanceS says, "We have to say HI to SUZANNE"
 VanceS says, "Sorry SUSSSSSANNNE"
 VanceS says, "(no z's in Susanne)"

- b Michael_C [guest] says, "In the situation EDbony described I
 thnk I would 'ploitely' ignore the teacher."
 Michael_C [guest] says, "I mean politely"

- c Ebony [guest] says, "Yea"
 VanceS says, "You'll see our emails and you can visit our
 websites, find out more about us."
 Ebony [guest] says, "OOps....I mean yes"
 JohnSte says, "I thought it was Yep."

- d BJB says, "I too have to leave and go make breakfast for
 hubbyu"
 BJB . o O (hubby)

- e Ying [guest] says, "hanks. Aruthrum"
 Ying [guest] says, "thanks."

One explanation of why many experienced members of *Webheads* tend to punctuate and capitalise many of their turns is that *Webheads* is a virtual language learning community, with participants who are learners of English. Participants new to *Webheads*, whether learners or not, sometimes come to the group with spelling patterns bearing heavy resemblance to those found in much IRC and text messaging, as these examples show:

(8.22)

- a Paolo [guest] asks, "r u all teachers ?"

- b Paolo [guest] asks, "r u organising the next voice chat
 session?"

Such forms tend not to be used by established *Webheads* members (8.23a) or by newer members who are professional English language teachers (8.23b):

(8.23)

- a ying [guest] asks, "moose... are you Canadaina?"
b RoslynT asks, "Are you paying for this English course, Ying?"

This suggests that there is a differing attitude towards spellings and abbreviations of this type on IRC and in the *Webheads* group. As already noted, a first reason for this may be the status of the group as a community of language learners and tutors. A second conclusion is also possible, relating to the level of reflection before posting a turn in particular SCMC environments.

Elsewhere (Chapters 6 and 7) we have stated that the speed of SCMC discourse does not invite participants to reflect at much length before posting a turn. By the time a well-considered response to a turn has been composed, the conversation has moved on and the relevant section of text has scrolled up the screen. Nonetheless the careful spelling and punctuation of *Webheads* members, particularly when compared to typical IRC users, may be related to the relative levels of reflection in different SCMC communities. Olson, on the effect of writing on speech, noted (1994:118) that: '... people introspect the grammar of their speech in terms of their writing system and, hence, may judge casual speech to be "loose and unruly" or "ungrammatical" and learn to shape their speech to the written mode.' It is possible that introspection is more common in *Webheads* discourse than in other SCMC discourse; the interaction is, of course, often between learners and tutors of English. In such cases the level of introspection may be associated with a desire for written accuracy. Learners may wish to produce what in their perspective are accurate turns, and accurate writing for most learners involves using standard spelling and punctuation.

This does not prevent the use of linguistic and discourse forms characteristic of other types of SCMC discourse and of mobile phone text-messaging, as we saw in Chapter 4. These forms, for example, emoticon use, reduplication and reciprocation in greetings, were proposed there as being markers of group or community membership. It may be too much to say that the prevalence of standard orthography and punctuation in *Webheads* SCMC discourse is also such a group marker.

8.5 Learning the skills of electronic literacy

In sections 8.3 and 8.4 we noted that instances resembling conventional aspects of language teaching and learning do occur in the *Webheads* SCMC sessions, though not with great frequency. In this section, we investigate how aspects of the development of the skills of electronic literacy are evident in the text of *Webheads* SCMC discourse. The phrase *skills of electronic literacy* can be used as a convenient shorthand term for a number of types of knowledge. As they relate to learning in the *Webheads* group, they correspond roughly to certain components of electronic communicative competence, as outlined in Chapter 3, section 3.4, and are listed here as types of learning.

1. Learning linguistic forms and features specific to text-based CMC: an element of linguistic competence.
2. Learning to manage the discourse aspects of SCMC (for example, navigation between floors): an element of discourse competence, sometimes associated with multimodal competence.
3. Learning the technical skills required to participate successfully in SCMC: an element of technological competence.

In the section 8.3 we touched briefly on the way any participant may adopt a tutoring role when instructing other members in the meaning and use of linguistic features of SCMC. This is regardless of whether they joined *Webheads* as a learner, a tutor or an interested ‘other’. Towards the end of this section we see an example of how a lexical item – an acronym – is explained to the group by a *Webheads* member who joined as a learner.

The second skill, the management of discourse aspects of SCMC, relates primarily in this study to the ability to participate in text-based SCMC discourse. This requires a broad range of sub-skills. Below in this section, we examine a stretch of discourse text where a novice participant is learning how to take part successfully in SCMC discourse by opening a log of the text chat. This is, of course, a demonstration of a very small aspect of how the discourse of SCMC is managed by participants. As we noted in Part Two of the thesis, participants not only converse in different areas of a particular SCMC space, but also take part in a number of different online conversations – both text-based and voice-based – at a time. We have previously referred to this aspect of discourse competence as *multimodal competence*, and saw an example in Chapter 4. However,

considerations of space unfortunately preclude any further exploration of this issue in Chapter 8.

The third skill overlaps with the second to a great extent. The ability to participate in SCMC of any kind requires gaining access to the relevant technology. We see later in this section how the boundary between discourse competence and technological competence is not necessarily clearly defined, as we discuss an instance where a *Webheads* member is being taught how to navigate around a MOO. The relationship between discourse and technology is not new in the history of literacy. However, with chirographic and typographic literacy the technology has been *interiorised*, to use Ong's term, to the extent where the interplay of the participant and the technology is unremarkable. Conversely an examination of electronic literacy at a relatively early stage in its development can highlight instances where participants struggle to master the technology: a prerequisite for effective participation in the discourse.

To discuss learning the skills of electronic literacy (i.e. gaining electronic communicative competence) with reference to the logs of text-based SCMC with the *Webheads* group, it is at times useful to employ the analytical tools developed in Chapter 6 of this thesis. In this section, three such tools are used at times:

1. The notion of topic framework, where activated features of context are outlined as a preliminary to analysis (Brown and Yule, 1983:78).
2. The concept of the conversational floor, comprising the following elements: participants (and their roles); verbal activity (comprising topic and communicative action) (Edelsky, 1981; Shultz *et al.*, 1982; Hayashi, 1991; Cherny, 1999); and medium-related features such as the semi-permanent record of the interaction in the discourse text as it scrolls up the screen.
3. The technique whereby the textual record of a multiple conversational floor is divided into its constituent parts for the purpose of analysis.

8.5.1 Managing the discourse of SCMC

Chapter 2 included a description of the MOO *The Palace*. It was noted then that turns when sent appear both in a text box as a log and as speech bubbles, cartoon-style, above the individual's avatar. The following extract, 8.24, shows how individuals are taught how to use the log of chat in this virtual environment. The topic framework, incorporating activated features of context can be noted thus:

Conversation in the graphical MOO *The Palace* between Ying-Lan, Brazil (learners with *Webheads*), Vance, Maggi (tutors with *Webheads*), and dodo (a visitor and new *Webheads* learner), early in the history of *Webheads* SCMC meetings.

The extract shows a multiple conversational floor comprising a main floor and a side floor.

(8.24)

- 1 Ying-Lan: ^Put "^" before your sentence, It will keep your
ballon for a long time.
- 2 Vance: ^True, but most of us are using the chat log. Do
you know how to do that?
- 3 dodo: ^thanks
- 4 dodo: no , would you tell me?
- 5 MAD: @64,64 !It's MAD
- 6 Vance: Options / Log Window
- 7 MAD: Hi...who is dodo?
- 8 Vance: Dodo is from China, Guangdong.
- 9 Vance: He's a new student.
- 10 dodo: hi, mad
- 11 Vance: Dodo, do you have a log window on now?
- 12 Ying-Lan: ^Opne /Option/ and mark toolbox , you can see
the tool box window at your lefe hand. Click the log you
will see our conervation record.
- 13 Ying-Lan: left hand
- 14 Ying-Lan: hi, mad
- 15 Brazil: But where do I save the log ??
- 16 MAD: Michael is late!
- 17 Vance: I usually just copy it to the buffer and paste it
to a word document

For our purposes here we are concerned with the main floor, a collaborative floor, thus we may ignore the side floor surrounding the arrival of Maggi: turns 5, 7-10, 14 and 16.

The collaborative floor which remains can be named according to the three components of floor: participants, verbal activity, and topic. Thus we can label it: Ying-Lan and Vance explaining to dodo and Brazil how to use features of chat in *The Palace*.

Although the label given to the floor captures the broad picture, it comprises three distinct phases. Ying-Lan begins by explaining to dodo how to make the turn in the speech bubble remain on the screen for longer than normal (turns 1 and 3):

(8.24a)

- 1 Ying-Lan: ^Put "^" before your sentence, It will keep your
ballon for a long time.
- 3 dodo: ^thanks

The central collaborative teaching is done in the middle turns when Ying-Lan and Vance explain to dodo how to read the chat log:

(8.24b)

- 2 Vance: ^True, but most of us are using the chat log. Do you know how to do that?
- 4 dodo: no , would you tell me?
- 6 Vance: Options / Log Window
- 11 Vance: Dodo, do you have a log window on now?
- 12 Ying-Lan: ^Opne /Option/ and mark toolbox , you can see the tool box window at your lefe hand. Click the log you will see our conervation record.
- 13 Ying-Lan: left hand

One point to note concerning extracts 8.24a and 8.24b is that though she is a learner with *Webheads*, Ying-Lan adopts a tutoring role when the topic is one of discourse, rather than linguistic competence. She is an experienced user of SCMC, although her level of English is not high.

Finally, Brazil initiates a two-part exchange with Vance which completes the collaborative floor under discussion here.

(8.24c)

- 15 Brazil: But where do I save the log ??
- 17 Vance: I usually just copy it to the buffer and paste it to a word document

Text-based SCMC would seem to be an appropriate medium for collaboration in learning the skills of electronic literacy, from a language learner's point of view. The conversation in SCMC above is essentially about SCMC discourse. Self-reflective metalinguistic interaction of this kind is suited to SCMC for two reasons. Firstly, the discourse type provides a textual record of the interaction: language learners and novices in SCMC discourse can scroll back up the log and re-read previously posted turns. Also, interaction, though synchronous, does not occur as quickly as spoken conversation. When the number of current participants is low, learners are able to follow the text more carefully than they would be able to with spoken discourse.

8.5.2 Technological competence

The previous example demonstrated how discourse competence may be developed in SCMC interaction. However, discussion in the chat also extended to the technological: participants have to know how to open a chat text log before they can use it as a space for conversation. In the second example of this section, 8.25, the skill being taught relates to technological competence and also, indirectly, to discourse competence. The topic framework and activated contextual features are:

Conversation in the graphical MOO *The Palace* between Vance (tutor with *Webheads*) and Ying-Lan (learner with *Webheads*). The conversation takes place shortly after they were pestered by a pervert (see Chapter 4, section 4.5.2).

(8.25)

```
1   Ying-Lan: ^I don't understand what you were talking about
    the room of the campus by email.
2   Vance: OK, press ctrl-G
3   Ying-Lan: ^Am I late?
4   Vance: No, right on time
5   Vance: Do you have a room list?
6   Ying-Lan: ^Ctrl+G like "Find user" of the the Option.
7   Ying-Lan: Where do we go?
8   Vance: Cntrol G is "go to a room" under options
9   Vance: But if you select it, or type ctrl-G, you will see
    a room list
10  Vance: Do you see it?
11  Ying-Lan: ^Yes, I did.
12  Vance: Can you find dorm room #2?
13  Ying-Lan: Yes I do
14  Vance: Let's not go there yet ... but ...
15  Ying-Lan: ^You mena Dorm Room2?
16  Vance: If we need a quiet place we can go there
17  Vance: Yes, Dorm Room 2
18  Vance: When I was here last time, I met a wizard who
    showed me that place.
19  Ying-Lan: Now, or later?
20  Vance: later
```

Note that the verbal interaction was taking place in one area of the screen while the other actions were being carried out simultaneously elsewhere in the site.

Of interest is the way in which Vance at certain points ensures Ying-Lan is following the instructions he gives. At certain points the participant with the tutoring role (Vance) asks the learner (Ying-Lan) questions to ensure she is attending to the correct part of the navigation. In these turns, he makes sure she can see the room list to which he is referring:

(8.25a)

- 5 Vance: Do you have a room list?
10 Vance: Do you see it?
11 Ying-Lan: ^Yes, I did.

Having received this ratification, but not before, Vance then asks Ying-Lan if she can find dorm room 2 (floor ratification is discussed in Chapter 6, section 6.3.1):

(8.25b)

- 12 Vance: Can you find dorm room #2?
13 Ying-Lan: Yes I do

This process, whereby a learner is assisted through a learning situation by a more knowledgeable other, resembles that in the account of learning which makes use of the metaphor *scaffolding* (Wood, Bruner and Ross, 1976; Aljaafreh and Lantolf, 1994. See Chapter 7, section 7.5.1). Certain scaffolding functions are evident in extract 8.25, for example: recruiting interest in the task (turn 1); simplifying the task (turns 8-9); highlighting the relevant features (turn 16).

Not all criterial features of scaffolding as listed by Wood *et al.* are evident here. Nonetheless, two points can be made which support this aspect of sociocultural theory:

1. Any learning that has occurred here is the result of a dialogic process whereby the learner has been supported by the tutor.
2. The process was instigated by the learner: it was she who focused initially on the issue of navigating in the MOO.

These two points correspond to a large extent with Vygotsky's (1978) view that learning occurs as a result of support from a more knowledgeable other; and that such learning will only occur when it is appropriate to a learner's current and potential level of development (i.e. the learner is within the ZPD).

8.5.3 A multiple floor and the skills of electronic literacy

For the final part of this section we analyse a multiple conversational floor with three intertwined floors (example 8.26). Each individual floor contains a separate example of how the skills of electronic literacy can be developed in the *Webheads* SCMC interaction.

The prevalence of topics in this interaction relating to the areas of electronic literacy development outlined in this section deserves attention, in particular with reference to the lack of explicit language instruction which takes place with *Webheads*. Hence we return to the contention proposed in Chapter 6, section 6.3.4, that certain verbal activities (in conjunction with the other components of conversational floor, participant roles and topic) are particularly suited to the SCMC medium.

As a preliminary activity, we return to the method developed in Chapter 6 of separating the text into its constituent parts for the purposes of analysis. We begin with a brief contextual framework noting the activated features of context thus:

Conversation in the MOO *The Palace* between participants Felix and Ying-Lan (learners with *Webheads*), Maggi, Michael and Vance (tutors with *Webheads*) on 10 January 1999, i.e. early in the history of the *Webheads*' use of SCMC.

(8.26)

```
1    Felix: Michael what does RealPlayer encoder do? It
      converts wav into au ?? Does it make the files smaller
      ??
2    Michael C: Like I'm very considerate when I talk to MAD
      because I know she's so sensitive!
3    Maggi: Could someone really read all my ICQ messages?
4    Felix: He is turning into you now Mad.
5    Felix: Yes Mad...
6    Ying-Lan: I read it.
7    Maggi: ROTFLMAO
8    Michael C: Encoder converts .wav to .rm and yes it makes
      the files a lot smaller.
9    Felix: thanks for the info Mike
10   Maggi: Really Felix...they could?
11   Vance: Is encoder free?
12   Michael C: MAD - what id ROFLMAO?
13   Felix: i think so
14   Michael C: Encoder is free.
15   Felix: Yes, Maggie..My sis and i got serious problems
      with it....
16   Maggi: Rolling on the floor laughing my ass off...
17   Michael C: What was that about watching your mouth?
18   Vance: There's another use of OFF, sort of movement,
      figuratively.
19   Maggi: Well...there is some interesting stuff on
      mine...hmmmm
20   Felix: LOL
21   Felix: @MAd
22   Maggi: that wasn't my mouth...:-)
```

The text can be separated into three labelled floors, each of which can be discussed separately:

Felix, Maggi and Ying-Lan chatting about ICQ

(8.26a)

- 3 Maggi: Could someone really read all my ICQ messages?
- 5 Felix: Yes Mad...
- 6 Ying-Lan: I read it.
- 10 Maggi: Really Felix...they could?
- 15 Felix: Yes, Maggie..My sis and i got serious problems
 with it....
- 19 Maggi: Well...there is some interesting stuff on
 mine...hmmmm

This is a collaborative floor, and the participants are chatting in a light-hearted way about the chat software program ICQ. There is a tutoring element here as well, and the role of tutor is taken on by Felix. He joined *Webheads* as a learner; however, he has expert knowledge of the tools of CMC, and is thus in a position to undertake the tutoring role.

Michael explaining to Felix and Vance how Real Player encoder works.

(8.26b)

- 1 Felix: Michael what does RealPlayer encoder do? It
 converts wav into au ?? Does it make the files smaller ??
- 8 Michael C: Encoder converts .wav to .rm and yes it makes
 the files a lot smaller.
- 9 Felix: thanks for the info Mike
- 11 Vance: Is encoder free?
- 13 Felix: i think so
- 14 Michael C: Encoder is free.

This is a speaker-and-supporter floor. The details which Michael is explaining are quite technical, and the turns of Felix and Vance have the function of prompting Michael into further explanation. In Chapter 6 we noted the proclivity for a speaker-and-supporter floor to develop when the communicative action of the verbal activity is didactic. This can be seen here also.

Michael, Maggi, Vance and Felix chatting about the jargon of SCMC.

(8.26c)

- 2 Michael C: Like I'm very considerate when I talk to MAD
because I know she's so sensitive!
- 4 Felix: He is turning into you now Mad.
- 7 Maggi: ROTFLMAO
- 12 Michael C: MAD - what id ROFLMAO?
- 16 Maggi: Rolling on the floor laughing my ass off...
- 17 Michael C: What was that about watching your mouth?
- 18 Vance: There's another use of OFF, sort of movement,
figuratively.
- 20 Felix: LOL
- 21 Felix: @Mad
- 22 Maggi: that wasn't my mouth...:-)

In this instance we join the floor at the tail-end of a previous topic (turns 2 and 4), though participants and verbal activity (*Michael, Maggi, Vance and Felix chatting...*) remain constant. The topic noted here in the floor label (*the jargon of SCMC*) begins at turn 7.

It is a collaborative floor, like many floors where the topic concerns a language point. Here, the participants are all tutors with *Webheads*. Maggi adopts the main tutoring role, and Vance to a certain extent contributes. Michael is in the learner role, as is Felix presumably when Vance posts his turn.

Two points of interest emerge from this discussion in this section. Firstly, role relations *vis a vis* tutoring and learning are flexible. Although particular participants may have joined *Webheads* as learners, they may just as easily adopt a tutoring role when the topic is related to electronic literacy. At the same time, tutors with *Webheads* often find themselves in the role of learner. Secondly, the large amount of discussion by *Webheads* members of various facets of the skills of electronic literacy demonstrates not only the interest they have in the technology, but also in the communicative uses to which it may be put.

8.6 Conclusion

The conclusion to Chapter 8 is a brief summary of the analysis and discussion.

CMC-based CALL in a virtual language learning community may well not be oriented towards language learning. This is to say, even if the stated purpose of learners and tutors

is to learn or teach a language, the functions which are most prominent may in fact be metalinguistic (i.e. relating to the technology of the communication) or phatic (i.e. conversational and associated with the maintenance of social ties).

Evident in the text of the discourse from a virtual language learning community as examined in Chapter 8 is the development of electronic communicative competence amongst participants in the linguistic, discourse and technological parameters.

Again, we have seen that certain types of conversational floor are strongly associated with certain types of verbal activity. It is clear from the analysis in section 8.5.3 that a speaker-and-supporter floor is associated with the communicative action 'explaining'.

Part Four as a whole has shown that SCMC as used in language learning contexts is particularly good for language practice; that this practice is of SCMC discourse (not spoken or traditional written discourse); and that interaction which takes place within the context of a community tends away from a focus on linguistic form.

Part Five: Conclusion

This thesis has been a study of the discourse of CMC, in particular *synchronous* CMC, with close reference to a virtual community of language learners and their tutors.

Part Five contains just one final chapter, beginning with a short summary of the main conclusions arrived at throughout the thesis. The summary is organised around the four aspects of *electronic* communicative competence outlined in Chapter 3 as being important for effective communication in a particular virtual community: areas of sociocultural, discourse, linguistic and technological knowledge. In the sections which follow, the study is appraised in terms of its contribution to theories of community, literacy, and coherence in discourse. The last section is a short evaluation of the study as a whole, outlining some strengths and limitations, and suggesting areas for further research.

Chapter 9 Concluding summary and implications

9.1 Introduction

We are nearing the end of this investigation of the discourse of a particular type of computer-mediated communication: text-based, synchronous CMC (SCMC), as it is used by members of a virtual community. Section 9.2 of this chapter comprises a summary of the main findings and arguments. The chapter continues with further discussion of the contribution of the study to theories of community, literacy, and coherence in discourse (sections 9.3 to 9.5). And finally (section 9.6) the study is evaluated: the final discussion is of its limitations and strengths, and of directions for further research.

In Chapter 1 the following questions were posed with reference to a particular online community:

1. How does the character and purpose of the community affect the linguistic and discourse patterns of use?
2. What are the linguistic and discourse resources which individuals need for successful interaction within the community?

We addressed the questions in a number of ways. The questions themselves presuppose the existence of a definable community. Thus in order to treat the community as a unit of analysis, we first had to conceive of the *Webheads* group as a community. In Chapter 2 we asked what type of community this is. It was established that the community had a number of purposes, both explicit ('a community of language learners') and implicit (with a focus on developing the skills of electronic literacy than of language *per se*). We return to the issue of community in section 9.3 below.

Findings reported and described throughout the study support the notion that the character and purpose of the community are reflected in the linguistic and discourse patterns of use. In Chapters 3 and 4 we entered discussion of these patterns with an enquiry into the nature of some literacy practices engaged in by members of *Webheads*. Here, where there are a number of purposes for communication, both open and hidden (language learning, learning about technology, socialising, international cultural exchanges), and where communication is quite informal, some of the resulting literacy practices are startling in their novelty. At the same time, there are certain features of the *Webheads* discourse, as noted in Chapters 4, 5 and 6, which are commonly found in many

online groups where interaction is via text-based synchronous CMC. Section 9.4 below stresses that individuals' engagement with the technologies of literacy occurs in the broader contexts of their use. These *situated* literacy practices are as distinctive when they involve the technologies of electronic literacy as they are when involving other, more established, literacy technologies.

In Chapters 5 and 6, the discussion of coherence in SCMC discourse tackled the matter of the second question. In addition to a certain competence in the language of the community (English), participants were found to require broad knowledge of various kinds if they were to ascribe coherence to the discourse. This knowledge was of the particular ways in which cohesion operates in SCMC, of technological characteristics which might affect the discourse, and of various types of background knowledge. The implications which the discussion of coherence in SCMC has for studies of coherence in general are outlined in section 9.5 below.

9.2 Summary of the study

After an introduction to CMC (Chapter 1) and of the *Webheads* community (Chapter 2), the foundational discussion in Chapter 3 was devoted to sustained attention to the nature and history of literacy in relation to *electronic* literacy. CMC was considered as a literacy technology, like writing and printing. An approach to the study of electronic literacy was established whereby the autonomous skills of electronic literacy are viewed in parallel with the literacy practices of a particular community. We discussed three aspects of 'autonomous' electronic literacy: multimodality and multimodal communication; web literacy; and text-based synchronous CMC.

Also in Chapter 3 we extended the notion of communicative competence to encompass the discourse being considered in this study, as used by members of the *Webheads* community which was the contextual milieu for the investigation. It is therefore appropriate to frame these summarising comments in terms of four areas of knowledge which participants in SCMC discourse may need for successful involvement. In previous chapters we have referred to (1) a knowledge of the *sociocultural* rules of a particular virtual community; (2) a knowledge of *discourse* patterns of SCMC; (3) a knowledge of the *linguistic* system used by members of a particular virtual community; and (4) a knowledge of the relevant *technologies* of electronic literacy.

9.2.1 Sociocultural knowledge

There are general features common to most SCMC discourse. As noted in Chapter 3, the similarities which distinguish SCMC as a discourse type are as follow:

- SCMC is text-based communication via computer networks between geographically separate participants
- SCMC happens synchronously, that is, in real time
- turns in SCMC cannot be seen by other participants until after they have been sent
- participants in SCMC discourse can scroll back and forth to re-read previously sent parts of the discourse text.

Beyond this general set of characteristics, there are a number of electronic literacy practices which may be specific to individual communities which meet online.

The *Webheads* community of language learners, language teachers, and others has been the foundation for this study of the discourse of SCMC. In Chapter 2 we discussed the nature of communities which exist in online environments. We also outlined the various online meeting places of the *Webheads* community, paying particular attention to the multi-user domains (MOOs) used by *Webheads* for their online meetings: *The Palace*, and more recently, *Tapped In*.

Participants in the *Webheads* discourse thus make reference to at least two social contexts simultaneously: the context of the community itself, with its particular conventions; and that of the discourse setting, the virtual environment within which the interaction takes place, which also has its own norms of interaction. These discourse conventions and norms were referred to in Chapter 4 as *electronic* literacy practices.

Certain electronic literacy practices of the *Webheads* group interacting in SCMC were held to have close equivalents in spoken discourse. Among those were:

- emoticon use to represent paralinguistic features of face-to-face communication
- reduplication for the representation of prosodics in writing
- reciprocation upon greeting
- the use of back channel responses
- narration of real life activities.

Other electronic literacy practices were specific to, or at least highly characteristic of, interaction in a multi-user domain; in particular, we saw how byplay – interaction with participants and virtual objects in the online environment as if they were physically present – enables the development of *ad hoc* roleplay in the *Webheads* group.

Linked to the matter of electronic literacy practices was that of identity. We discussed ways in which identity could be adjusted in an online environment for benign and more malign purposes. Chapter 4 closed with a discussion of an area deserving of further attention: the ways in which participants in SCMC seem prone to the use of either intimate or abusive verbal behaviour in ways which seem to contravene pragmatic principles of face-to-face spoken communication. A number of factors were proposed as possible explanations for such behaviour:

- the absence of physical presence, and hence, of accountability in behaviour
- anonymity and the ability to disguise aspects of identity
- the ‘hyperpersonal’ appeal of a type of discourse with only reduced feedback, loose coordination of turn transfer, and conversational persistence (Herring, 1999), which is to say, the presence of a record of the conversation on the screen.

9.2.2 Discourse knowledge

The discourse patterns of SCMC text are affected both by the technologies of electronic literacy themselves, and by the novel social situations in which the participants are positioned. Knowledge of such discourse patterns was the focus in Part Three, discussed in terms of *coherence and cohesion online*. In Chapter 5 we discussed a number of features relating to coherence in SCMC discourse. We noted that although the cohesive devices familiar from more conventional spoken and written discourse are extant in SCMC discourse, real-time written conversation lacks much of the sequential cohesion of its spoken counterpart. In particular, disrupted turn adjacency was under discussion.

Nonetheless, the discourse was shown to be coherent, even if its textual manifestation lacked cohesion. Participants are able to ascribe coherence to the discourse of SCMC partly through appeal to elements of background knowledge, also detailed in Chapter 5. Amongst the elements noted were:

- schematic knowledge (formal and sociocultural)
- discourse knowledge

- technical knowledge.

The main investigation into patterns in discourse text in this thesis was in Chapter 6, where topic, and the topic-related notion of the conversational floor, were at issue. Investigation of the conversational floor was prompted by the phenomenon in SCMC for multiple threads of conversation to develop in parallel. Topic alone was seen as insufficient to account for the development of these discourse patterns. A description of the conversational floor takes factors in addition to topic into account.

In Chapter 6 we looked at three habitually occurring floor types:

- the single speaker-and-supporter floor
- the collaborative floor
- the multiple floor.

It was suggested that the development of particular floor types could be accounted for with reference to a number of specific factors, chief among these being:

- the role relations of the current participants
- verbal activity, comprising communicative action and broad topic
- medium-related features, including the lack of overlap in constructing turns, and the conversational persistence of the discourse.

Participants in SCMC discourse must also possess a measure of what we referred to as *multimodal* communicative competence. This was described as being the ability to participate in a number of online and onscreen communicative activities at once. Carrying out such multiple activities (i.e. multitasking) was also seen to contribute to the development of certain patterns in SCMC discourse. For example, topics tend to re-appear unannounced in the discourse; an explanation for this can be found when participants periodically devote attention to another onscreen activity, parallel to their written conversation.

9.2.3 Linguistic knowledge

The language of the virtual community *Webheads* is English; this is a community nominally dedicated to English language learning. Yet we noted that medium-related factors make it possible to interact successfully in the community without a great knowledge of the linguistic system. With SCMC there is a persistent textual record of the

discourse, and the speed of interaction itself tends to be slower than that of spoken conversation. These and other factors have encouraged language learners and teachers to exploit SCMC for language learning purposes. *Webheads* itself was described in Chapter 7 as a long-term World CALL project dedicated to collaborative language learning online.

In Chapter 7 we found that in some studies of the pedagogic application of SCMC to language classrooms, assumptions were made that SCMC is equivalent to spoken discourse and is homogeneous. This has led some researchers to view SCMC as a testing bed for research in the interactionist paradigm of second language acquisition (SLA). The contention in this thesis is that a sociocultural perspective on language learning serves better to inform us about the type of learning that goes on with the *Webheads* group. Yet while both SCMC and collaborative language learning online are commonly held to be beneficial to the language learning process, there are certain assumptions surrounding language learning online within a sociocultural approach which we questioned. The contention in this thesis is that:

- collaboration in online learning projects does not necessarily *of itself* promote language learning
- simple levels of participation in SCMC discourse are not necessarily an indication that the language learning experience is beneficial
- language learning does not necessarily profit from the lack of teacher control characteristic of online language instruction.

Within the *Webheads* community, we found in Chapter 8 that the learners in the group held beliefs about the benefits of learning with *Webheads* which were at times at odds with those of the tutors in the group. The learners felt that the benefits of belonging to the *Webheads* group were:

- they can practise English
- this practice is free
- they can have their writing corrected
- they can communicate with participants from a range of linguistic backgrounds
- they have developed international friendships within the community.

The advantage of *Webheads* membership to language learning as perceived by the tutors was largely that participation offers opportunities for practice. This corresponds to their approach to language teaching and learning, which can best be described as ‘natural’. In fact, as we found later on in Chapter 8, very little explicit language instruction actually takes place in the SCMC meeting place of the *Webheads* community, and that which does is almost exclusively focused on vocabulary.

9.2.4 Technological knowledge

For successful interaction in a virtual community, participants must possess a measure of technological competence, encompassing both access and technical ability. In Chapter 7 we discussed the way that access to the technology was not ‘all or nothing’. Individual participants may have access to certain tools of electronic literacy (email, perhaps) but not others (for example, video and audio conferencing). Such matters have a bearing on the ability of participants to become full members of virtual communities and to participate in new online cultures.

With reference to the *Webheads* group, in Chapter 8 we saw that much of the learning that goes on in the community in fact involves learning the skills of electronic literacy, including the technical skills required to participate fully in a virtual community. This has implications for the discourse patterns described in Chapter 6 as conversational floors. As with many online communities, role relations are particularly flexible in the *Webheads* community. We noted earlier that any participant, regardless of their identity, may adopt a tutoring role. What is more, we established in Chapter 6 and in Chapter 8 that when the verbal activity of the discourse (communicative action together with topic) is *explaining about the skills of electronic literacy*, the conversational floor which develops is likely to be a speaker-and-supporter floor.

In the sections which follow, we consider further the contribution this study makes to our understanding of the theoretical areas on which it impinges. In turn, these areas are community, literacy, and coherence in discourse.

9.3 Contribution of the study to theories of community

In this section we return to the issue of *community*; more specifically, how the present study contributes to the theorisation of *online* community. The study has demonstrated the possibility that a community can actually exist wholly online; that is, participants can

know each other via their interaction over the internet. Here we firstly review the way in which virtual communities form and evolve. This evolution also suggests a need to refine the definition of community to allow for online interaction. Thus secondly we turn to *Webheads* as we consider what type of community it is that can exist in an ever-changing sea of virtual environments.

The lesson from a study of the *Webheads* community is that virtual communities become practicable, and remain successful, for three prime reasons: firstly, the enthusiasm of their founders; secondly, a core membership, and thirdly, a willingness to allow change, development and flexibility in the short and long term. Virtual communities which do not share these attributes may not survive as the *Webheads* group has done, and doubtless *Webheads* provides a useful model of a viable internet-based community.

The founder of the *Webheads* group, Vance Stevens, and the other founding tutors, Maggi Doty and Michael Coghlan, were all working as volunteer online language tutors of other groups when *Webheads* started. We recall that this group is composed entirely of volunteers, where no fees are paid and no tutors are salaried. An interest in the technologies of the internet and the possibilities thus afforded by those technologies for language teaching and learning, was and remains an important factor for the original tutors of *Webheads*.

From its early days, a core membership of enthusiastic participants joined the interaction, whether on the email list, in the synchronous text chats in *The Palace* or in other SCMC forums. They found the group through word of mouth, personal recommendation, and forwarding via other internet-based language courses. *Webheads* has also benefited from its founder and tutors being involved with, and belonging to, internet-based email discussion lists and networks such as *Linguist List* and *Neteach-L*. *Webheads* has been the focus of an ever-growing catalogue of conference presentations, during many of which the group has been demonstrated 'live' to audiences of language teachers and learners. Active members of the group make use of virtual and real life networks; this has been a factor in the continued success of the group, enabling membership to grow.

We saw in Chapter 2 how the group evolved from a largely unsuccessful grammar and writing email class to a buoyant and thriving virtual community. Aspects of this evolution include, in the case of *Webheads*, making use of new technology as it becomes freely available and feasible to use, altering the pedagogic focus of the group, and migrating to more suitable internet-based 'homes' as they develop. The use of email and basic web-

page design was augmented by a succession of other CMC tools: text-based synchronous CMC, voice and video internet telephony, and complex combinations of these. And although the group remains ostensibly a language learning group, the SCMC interaction in particular has an ever-stronger focus on the practical utilisation of the tools of electronic literacy. Finally, establishing meeting places online has taken the *Webheads* group into the world of multi-user domains, MUDs and MOOS: firstly, to the public spaces of *The Palace*, and more recently to the educationally-oriented MOO *Tapped In*. The evolution of *Webheads* is accompanied by a corresponding development in these environments. For example, the MOO *Tapped In* recently became *Tapped In 2* as the interface underwent an overhaul and incorporated yet more sophisticated CMC features. Members and coordinators of communities such as *Webheads* must be willing to operate within the fast-changing world of virtual environments, and to keep pace with such change.

Communities which exist online are commonly termed *virtual communities*, the phrase made popular by Rheingold (1993). The broad definition provided by Rheingold (1993:5) was of: ‘... webs of personal relationships in cyberspace.’ Within this definition, we found in Chapter 2 that a community which exists online has characteristics of other types of community. The *Webheads* group, we suggested, retained elements of the speech community (Hymes, 1974; Saville-Troike, 1982), the discourse community (Swales, 1990) and the community of practice (Wenger, 1998; Lave and Wenger, 1991). *Writing for Webheads* is still referred to on its homepage as an online writing course; however, it has defining characteristics of a community of practice.

The notion of *community of practice* is well-suited to virtual communities which have learning of some kind as their goal. In his overview of the organizational characteristics of various types of network, Johnson (2002) notes that a community of practice has a learning orientation, an informal structure, and practice as the main learning mode. These features distinguish communities of practice from other types of networks such as social groups (where the main goal is socialising) and networks of practice (where discussion is the main learning mode). Although a great deal of socialising takes place in the various meeting places of *Webheads*, much learning also happens. This learning is of three main types: language learning (the ostensible *raison d’être* of the group), learning how to use the tools of electronic literacy, and learning the various linguistic and discourse practices of the community in particular and online communication in general.

9.4 Contribution of the study to theories of literacy

There is currently in progress a change in the way literacy is conceived. In this section, and in view of the discussions of literacy in this thesis, we reflect on the role of networked computers in reshaping the terrain of literacy and literacy studies.

We began the discussion of technology and literacy in Chapter 3 with an examination of the putative effects of the technologies of literacy on society and the individual. We suggested that the transforming effects of the technologies of literacy are undeniable. What is at issue is the relationship between those technologies and the contexts of their use. Rather than view literacy as an autonomous set of skills, current thinking on literacy regards it as the use of *practices in contexts*. To quote Kern (2000:16), literacy is: ‘... the use of socially-, historically-, and culturally-situated practices of creating and interpreting meaning through texts.’

This applies equally to all communication, whatever medium is involved in the texts’ production. Just as we talk of chirographic and typographic literacy, so it has become common to refer to *electronic* literacy: the range of skills and abilities needed to use the new technologies underpinning learning and life in the modern world. However, if we accept the broader view of literacy as extendable situated practices, we should consider electronic literacy practices, or electronic *literacies*, simply as elements of a person’s and a community’s communicative repertoire.

The multiple and individual nature of literacy practices involving information and communications technologies is increasingly recognised, and is reflected in titles of works such as Warschauer’s (1999) *Electronic literacies*, Hawisher and Selfe’s *Global literacies and the world wide web*, and Snyder’s (2002) collection *Silicon literacies*. This study of an online community is a contribution to this vein of research by dint of its insistence on treating the *community*, made up of individuals scattered worldwide, as a unit of analysis.

As well as countering the autonomous view of literacy by subsuming it into the contextualised view outlined above, an effort has been made in this thesis to respond to – and to an extent react against – a further position on literacy: that of technological determinism. Networked computers have enabled geographically separate individuals to communicate with each other in real time; the emergence of online communities such as *Webheads* should not simply be seen as a direct and simple result of the coming of CMC, however, but are rooted in a broader move towards global connectivity, the spread of English and what we discussed in Chapter 7 as the third industrial revolution:

informationalism. Thus the shift in the way literacy is perceived runs in parallel with the sense that communication in general is undergoing a move towards the complex and multi-faceted; what is termed a 'new communicative order' (Street, 1998) or 'new communication order' Snyder (2002:3). The new communication order is a shorthand phrase for the communicative milieu within which modern literacy practices, including those associated with screen-based technologies, exists.

As a group which is itself part of the new communication order, *Webheads* through its literacy practices exemplifies very well the salient features of such an order: the emergence of new types of discourse text, new discourse practices, new types of community and new ways of collaborating. The focus in this study has largely been on text-based SCMC and its use, though it is acknowledged throughout that CMC involves multimodal communication where the visual is prominent (Kress and van Leeuwen, 1996; 2001), and increasingly where uses of different semiotic codes are intertwined and integrated. Associated with the new types of text are novel discourse practices. We noted in Chapter 3 and elsewhere the growing tendency of attention to be polyfocal (Scollon, 1998). A feature of text-based SCMC is the propensity of attention to be polyfocal in one particular space on the screen. That is, the ability participants exploit of taking part in more than one written conversation at a time. This was just one of many original discourse practices described in the thesis as belonging to the *Webheads* group, although it seems to be a general tendency in much SCMC discourse. The *Webheads* group itself, as noted in 9.3 above, is a new type of community – a *virtual* community. The multiple nature of modern communication is evident here as well: when belonging to a community such as *Webheads*, we gain the recognition that an individual may belong to any number of constantly evolving communities which exist both online, in real life, or both. Finally, we turn to collaboration. In the case of *Webheads*, the new communication order has allowed the development of a successful online community whose members are separated geographically, culturally and linguistically, but who are able to engage in useful and meaningful collaborative exchanges online.

The study as a whole demonstrates the ways modern communication can be. As Snyder (2002:5) puts it: 'We are learning to read, write, speak, listen and view in different ways as new forms of communication are made possible by technological development.'

9.5 Contribution of the study to theories of coherence in discourse

In this thesis the major discussion of CMC has been on the discourse of synchronous, text-based CMC (SCMC). The main contribution this study makes to theories of coherence lies in its treatment of this discourse type.

In Chapter 5 we began with Cook's (1989:4) definition of coherence in discourse. Coherence is seen as: 'the property of being unified and meaningful.' It is usual with reference to more traditional forms of speaking and writing to make a strong link between coherence and cohesion in discourse, cohesion being the linguistic manifestation of coherence. Concentrating on actual linguistic linkages which are central to coherence is vital, but can also lead one to neglect the further essential elements of coherence. A focus on SCMC is illuminating as it both necessitates a re-evaluation of the connection between cohesion and coherence, and highlights the fundamentally interpretive nature of the search for coherence.

For SCMC is largely uncohesive in conventional terms. It lacks, to use Herring's (1999) term, *sequential coherence*. This lack is most obvious when we consider two features of SCMC (as we did in Part Three): disrupted turn adjacency and the development of multiple threads of conversation. Disrupted turn adjacency refers to the tendency for turns to appear out of their expected serial order. The responsible factors noted were that turns in SCMC cannot be seen by other participants until after they are sent; and that the visual and auditory cues of the turn taking system of spoken conversation are missing in written conversation. Multiple threads, the surface evidence of the existence of a multiple conversational floor, occur when more than one conversation is happening at a time within the same space on-screen.

Yet the point is also made that successful participants know that the discourse does not have to be cohesive to be coherent. They overcome the ambiguities of SCMC discourse text – disrupted turn adjacency and the preponderance of multiple threads – by appealing to types of background knowledge when ascribing meaning to the discourse text. We spoke of two areas of *schematic* knowledge, formal and sociocultural, as being important in this respect. In addition, and as noted in 9.2 above, participants in SCMC make appeal to linguistic, discourse and technical knowledge in their search for coherence.

The concern in Chapter 6 with particular patterns in discourse text developed the topic-based notion of conversational floor as a concept which aids participants in their search for coherence. Conversational floor, also outlined in 9.2 above, is a reflection of a

complex intertwining of verbal activity (topic and communicative action), role relations, and technological features of SCMC. In the case of SCMC in a virtual community of language learners, we frequently see particular floor patterns in the discourse text associated with particular topic types, communicative actions and interplays of role relations. Thus, for example, a speaker-and-supporter floor frequently develops when the communicative action is didactic, the topic is associated with the technologies of CMC, and the role orientation distinguishes the tutor from the students.

This thesis has largely avoided direct comparisons between spoken and written conversation. No grand claim has been made that coherence operates in a fundamentally different way in CMC discourse than in more traditional spoken conversational discourse. Nevertheless, there are a number of distinctive features which at least require one to approach aspects of the analysis of SCMC in a different way than one approaches the analysis of spoken conversation. In particular, applying the techniques of analysing the turn-taking system of spoken conversation to written conversation is found to be a sterile pursuit. Yet the more fruitful work on conversational floors is grounded in research into spoken conversation, albeit multi-party spoken conversation.

9.6 Limitations, strengths and areas for further research

9.6.1 Limitations and strengths

Inevitably a study of any size and scope will have limitations. These can, however, be viewed productively as potential areas of further research.

For example, this study might have exploited the opportunity of examining data from more than one community. Investigating two or more similar communities would have provided points of comparison at various stages in the research. It was sometimes unclear in this study whether the features being discussed applied to all or most online discourse of this type, or if they were unique to the *Webheads* group. A future study of another virtual community may thus make use of findings from *Webheads* to show where there is common ground across communities' linguistic, discourse and literacy practices, and where such practices are specific to a particular community. Nonetheless, the focus on just one community was also a strength of this project. Being a participant-observer in an online community, and becoming involved in interaction as a member of that

community, provided insights which would otherwise be lost if analysis had been based on a remote investigation of discourse text gathered from a number of different contexts.

The study provided the opportunity to examine an enormous amount of language data. The research as a whole would have been strengthened if fuller use had been made of the possibilities afforded by the electronic analysis of large quantities of naturally-occurring language data. Corpus linguistics allows for the use of concordance tools to search for patterns in large corpora of the type prepared for this project. Only limited use was made of such tools here. In so far as this research was exploratory, a 'next step' may also involve sophisticated tools for analysing qualitative data. It is possible, and increasingly feasible, to carry out longitudinal analysis of logs of SCMC data collected from one community and spanning a number of years, and hence to track changes in language use over time. This potential was under-exploited here.

A further strength of the study – its breadth of scope – can also be considered a limitation. The study attempted to cover the areas of literacy, coherence in discourse, and language learning within the compass of an enquiry into a virtual community. This inevitably led to all these areas receiving less attention than they would have done, had any one of them been the sole focus.

9.6.2 Areas for further research

The study suggests many areas where further research would lead to insights into the nature of language, CMC and virtual communities. Here we touch on just five of these.

There is already much work going on in describing virtual communities and online social and work networks. The literature is in fact becoming enormous. However, in the case of the community in question in this study, *Webheads*, the existence of a textual record of its development provides us with the opportunity for carrying out longitudinal studies. It is rare to find such a full textual record of interaction in a virtual community stretching back so far. A history of *Webheads* would be a valuable contribution to the growing literature on virtual communities.

A fascinating strand of research would lead from the question of the ways in which participants in SCMC use either intimate or abusive verbal behaviour in ways which contradict pragmatic principles of face-to-face spoken communication. A number of factors were proposed as possible explanations for such behaviour in the thesis, and fuller investigation would inform theories of identity in online communication.

There is scope for extended work on conversational floors in SCMC. In particular, the data in this study could be used to build up a more detailed and comprehensive taxonomy. Further work would involve comparing floor patterns in different virtual communities, with a view to ascertaining in more depth the processes involved in their development.

Of frequent note was that participants were often engaging in multimodal communication; that is, they were using text-based synchronous CMC and voice or video CMC simultaneously. The present study only made limited efforts at capturing this many-faceted interaction. A rich strand of further research lies in the development of tools and instruments for the analysis of online multimodal discourse.

Work in Part Four of the thesis suggests that there is a lack of research into the type of language people use, and learn to use, when they are learning languages online. Much useful research could have as its starting point a questioning of the assumption that raised levels of participation, and collaboration in and of itself, leads to good language learning.

Appendices

Appendix 1: SCMC session at *Tapped In*, 8 August 2001

VanceS says, "who have met consistently online once a week for 3 years now, since 1998"

VanceS says, "We have three ways of communicating basically"

SusanLM says, "What do you all do online/"

VanceS says, "One is via our website which I just projected:
<http://sites.hsprofessional.com/vstevens/files/efi/Webheads.htm>"

VanceS says, "And this is the portal. On the site you can browse and meet the students"

VanceS says, "A second way we communicate is through out yahoogroups list serve, what we call the eclass"

SusanLM exclaims, "Sorry!"

VanceS says, "and the 3rd way is through students' webpages, which you can view by browsing the site"

VanceS says, "Now, I wonder if John and Juani might like to comment on their role in Webheads"

graham [guest] exclaims, "what is the name of the yahoo group - I am on 40 but I can't find it!"

VanceS says, "and while they're doing that I'll project their sites and the chat that Suzanne joined"

VanceS says, "efiWebheads@yahoogroups.com"

juani [guest] says, "yes,I 'd like to"

VanceS says, "You can find that info on our site"

VanceS asks, "Ok, Juani, would you like to start about yourself?"

VanceS says, "We're fed students by EFI, English for Internet, at <http://www.study.com>"

SusanneN [to VanceS]: "I liked the way you linked the different modes of attachment from that day!"

juani [guest] says, "I'm a teacher in Chile ,in the Liceo Rector Abdon Andrade Coloma in La Union,tenth region"

VanceS says, "While Juani is talking, I'd like to project her Webheads page"

VanceS [Webhead] projects the URL:
<http://sites.hsprofessional.com/vstevens/files/efi/juani.htm>

VanceS says, "go on, Juani ..."

juani [guest] says, "I've teaching English for a long time.I applied for the Fulbright Exchange programme last year and I got the Grant"

VanceS says, "She's in Rifle, Colorado now"

juani [guest] says, "So,I 'm in Rifle high School in Colorado,USA,right now."

JamesSi says, "Hi Juani. Nice to find out about you"

SusanLM exclaims, "Hi Juani!"

PhilB asks, "Vance, when you say you are "fed" students, do you mean you are all volunteering to do EFL tutoring? Or is this some sort of contractual project?"

graham [guest] says, "Sorry Ive got to go now - I joined the yahoo group and will see you again some day - thanks for the exercise"

JamesSi says, "Bye Graham"

SusanLM exclaims, "Bye!"

VanceS says, "contract? money? What's that? No, we're all volunteer, as is study.com"

JohnSte [Webhead] has lost his link.

VanceS asks, "kiki?"

graham [guest] says, "out"

juani [guest] says, "I'm using one of the Rifle High School computers right now,even though activities are starting next week"

PhilB [WebTeach] nods

VanceS says, "The interesting thing about Webheads is that it's been viably all volunteer for 3 years"
JamesSi asks, "So does study.com have their own teachers as well?"
VanceS says, "Yes, they do, again volunteers"

Appendix 2: Email to *Webheads* on research, 4 December 2001

Hello everyone!

In the Sunday chat sessions we have been talking about the ethics of logging and using the transcripts of our discussions. As one of the *Webheads* who has a research agenda, I would like to put across my views and explain my own research.

The prime reason for logging the chats must be for learners to go to the logs and read through the bits they either missed or didn't understand first time around. If I miss a session I skim through the log to find out what went on, and I'm sure many others do the same. But a further reason for saving the logs is for research.

When I first started researching computer-mediated communication in October last year I knew very little about it. I had been an EFL teacher for twelve or so years, but had never explored the potential of the emerging technology. In the early months of my research I became very interested in the discourse of CMC from an academic point of view, and also in the pedagogical potential of the new technology. What I wanted to do, and what I still want to do, was to combine discussion of the linguistic aspects of text-based CMC with ways in which language learning can be enabled by CMC and the internet.

Of course I needed to find an example of a web-based English language learning context. And when I found *Webheads* I was delighted from a research point of view. Here was a pioneering example of the potential of CMC to make a difference with the technology.

But something else has been happening since I joined *Webheads* which I was less prepared for. I did not realise the extent to which I would enjoy the online chats and being part of an online community. Meeting learners and other teachers from around the world online is a thoroughly rewarding and enjoyable experience. And I have come to understand that the boundary between teacher and learner in *Webheads* is well and truly blurred. I have learned an enormous amount since I joined.

So what about my research? I am a PhD candidate at the University of Reading, UK, in the School of Linguistics and Applied Language Studies. I first spent quite a lot of time studying synchronous CMC chat from a number of sources (IRC, Messenger, etc) and developed a fairly good idea of the type of discourse features which might be worth looking at with reference to language learning. Without going into too much detail, let me outline what I'm looking at in the *Webheads* data.

In the chapter where I introduce my research questions, I discuss collaboration as a concept, and look at the linguistic and discourse features of collaborative language learning. I identify turn-taking as being at the heart of collaboration and also of interactivity, proposing that questions of collaboration can be addressed with reference to the interactivity of the discourse. I outline a preliminary list of discourse and linguistic features which might be said to characterise interactive turns and exchanges in synchronous CMC-based CALL discourse. The discussion in this later part of the chapter generated a number of guiding questions which, when fully developed, will serve to guide the analysis of the *Webheads* chat data.

These questions still need some refinement, but I'll write them down here to give you an idea of where I'm going.

Q.1 In the specific context of the web-based language learning environment at the heart of this thesis (EFI*Webheads*), what are the characteristics of participation levels amongst the individual participants?

Q.2 How do levels of participation amongst participants change over time?

Q.3 Within the context of the specific web-based language learning environment, how does collaboration between learners and peers exist in synchronous, text-based CMC discourse?

Q.4 Given the complex nature of turn-taking behaviour on synchronous CMC, is it possible to identify interactive turns and exchanges in the text of the discourse under investigation?

Q.5 Do the following discourse and linguistic features exist in interactive turns (or at some point within an interactive exchange) [significantly] more than in non-interactive turns?

- Statements of opinion which refer to previous turns
- Questions which refer to previous turns
- Expressions of agreement with statements in previous turns
- First person plural pronoun

- Reciprocation in addressivity
- Third person action (including back channel)
- Split turns for interactivity

I hope to say a lot more about the development of a virtual community and about other issues to do with electronic literacy, so looking at the text of the discourse is a starting point. What makes *Webheads* interesting is that the distinction between learners and others is not clear. I think that will be increasingly the case as more people find an element of their language learning experience online.

My area of research has caught the imagination of many in my department, and a number of English Language students and lecturers have shown an interest in joining *Webheads*. But I really want to know what people think about using the chats for this type of linguistic research.

I see three possible options:

1. Keep things as they are, i.e. treat the logs as a public resource and simply proceed with my study
2. Anonymise the logs, i.e. change the names of all the participants
3. Contact each participant individually to ask for written (email) permission to use their postings
4. Warn everyone as soon as I get online that I might be using the logs of the chat for research purposes.

I am prepared to do 1-3; 4 would be difficult if a) I wasn't there, and b) if I want to go back in time to early logs.

I'm sorry to be so long-winded about this, but I don't want to go ahead any further without getting an idea of what people think. So I welcome your comments.

James

Appendix 3: Log of chat S051, *The Palace*, 19 December 1999

Chat with student Ying-Lan from Taiwan and teachers Michael C and Maggi
December 19, 1999
.22:00:59 - Opening Log
Ying-Lan: @64,64 !It's Ying-Lan
Ying-Lan: hi. Michaelc
Ying-Lan: Are you here?
MichaelC: Good evening Ying. How are things?
Ying-Lan: Not so good.
Ying-Lan: I took a test this morning.
MichaelC: What's wrong?
MichaelC: testing....
MichaelC: What kind of test? For English?
Ying-Lan: I don't know how to prepare those test!
Ying-Lan: So hard for me.
MichaelC: Was it an English test?
Ying-Lan: NO....
MichaelC: What then?
Maggi: @64,64 !It's Maggi
Ying-Lan: A professional test about loan department.
MichaelC: Howdy Maggie.
MichaelC: So you're feeling a bit depressed then?
Ying-Lan: Yes,,, a bit depression.
MichaelC: But sometimes you can feel you went badly but in reality it's OK. Maybe it wasn't so bad?
Ying-Lan: I also got up early today.
Ying-Lan: NO... it is bad.
Ying-Lan: I checked the answer in book.
Ying-Lan: Forget it.
MichaelC: Oh I see. What happens now?
Ying-Lan: I just think I may be too old to remember those materials.
Maggi: @64,64 !It's Maggi
Ying-Lan: Hi, maggi.
MichaelC: Never too old!
MichaelC: Having connection problems Maggie?
Maggi: Hi...I still only have a half pic
Maggi: yes...got kicked the first time
Ying-Lan: I watched TV there was a terrible rainy day in a country... what is it?
MichaelC: Maggie - maybe I'll try and send you the pic file. Shall I?
MichaelC: Venezuela - where Vance was.
Maggi: Not worth the effort mc
MichaelC: OK Maggie.
Maggi: I know what it looks like anyway
MichaelC: Yes - it's just the same as it was!
Ying-Lan: Yes.... Venezuela, I also reminded Vance at that time.
MichaelC: According to his email he is now in Aruba - in the Caribbean.
Maggi: We had snow all weekend!!
Maggi: LUCKY DUCK
Maggi: Lucky
Ying-Lan: Maggi, What do you do in the snow day?
MichaelC: Wow! Snow time. We are having beautiful mild days - 20/25 degrees.
Maggi: shovel it
Maggi: :-)
Ying-Lan: It is very cold and wet in Taiwan now.
MichaelC: That must have been fun! (not!)
Maggi: This is not the first snow this year

Maggi: I made Stefan do it...:-)
 Ying-Lan: Do you play snow on Weekend?
 MichaelC: Did you have to clear a path to your front door?
 Maggi: No...I am still too busy getting the house in order
 Ying-Lan: I only saw snow in Vancouver in summer.
 Maggi: have to do the sidewalk around the whole house
 MichaelC: So it must have been reasonably heavy snow then?
 Ying-Lan: It is not fun to clean those snow, right?
 Maggi: yesterday it was a real mess
 Maggi: turned into slush
 Maggi: then it snowed again
 Ying-Lan: Maggi, you don
 Maggi: I just stayed home
 Ying-Lan: You don't go out when it snows.
 MichaelC: Snow quickly becomes a big mess as I remember - unless it's really really cold and doesn't melt.
 Maggi: Not if I don't have to because people bdrive like idiots
 MichaelC: They had snow in Morocco today - only the 3rd time in history!
 Maggi: that must have been something
 MichaelC: You know - this is our last meeting of the millennium!
 Maggi: I remember in Tucson when it happened it was like a miracle
 Maggi: and Vance missed it...:-)
 Ying-Lan: Why!
 Ying-Lan: You won't be here next week, will you?
 Maggi: Guess mc is not coming next Sunday...
 MichaelC: Shame on Vance. And what's happening with Felix these days? Why isn't he coming to Palace anymore?
 Maggi: He is at the beach
 MichaelC: I'll be here next week.
 Maggi: with his family
 Ying-Lan: But you say this is the last meeting...
 MichaelC: That's right - I forgot - F is on holidays.
 Maggi: I'll be here too...so this is not the last time
 MichaelC: Whoops - I was wrong Ying. You're right - next week is the last one!
 Maggi: I saw him the other day...
 MichaelC: You saw Felix? Where?
 Ying-Lan: Vance is on his Vacation... Does he go back to USA with his family?
 Maggi: Where else silly...online...
 MichaelC: Yeh yeh - but at the Palace or just ICQ or email?
 Maggi: icq
 Ying-Lan: I received Felix's icq.
 MichaelC: As in i SEE q!
 Maggi: peek-a-boo!
 MichaelC: In answer to your q Ying - yes I think Vance is visiting family in the US.
 Maggi: he said so in his last email to the group.
 MichaelC: Ying - you're avatar looks very tired!
 Ying-Lan: It is important to be our family in Y2K New Year coming.
 Maggi: like I feel...
 MichaelC: I feel quite bonny!
 Maggi: I was invited to Zurich, but I think I will stay home.
 Ying-Lan: Yes, I am tired.
 MichaelC: I guess you got up early to study for your test Ying?
 Maggi: On a Sunday?
 Maggi: yuk
 Ying-Lan: Yes.
 Ying-Lan: I might be in my bed, if I had not be here.
 MichaelC: What's happening in Zurich Maggie?
 Maggi: mc is a bonny lad...:-)

Maggi: big party apparently...
 MichaelC: Apparently?
 Ying-Lan: Big party for what?
 Maggi: ...friend of hers is in Australia so we would have the use of a flat in the center
 Maggi: New Year's Ying
 Maggi: ok...it will be a whopper!
 Ying-Lan: Friend of Hers.... Hers is a party for women, right?
 Maggi: hers is a pronoun
 MichaelC: Sounds good. So why not go? Would you just prefer to be at home with friends?
 Maggi: a friend of hers
 Maggi: I have to think about whether I have the energy...
 MichaelC: Tired from moving?
 Maggi: I was invited to Norway for Christmas
 Maggi: there is still so much to do....
 MichaelC: I wasn't invited anywhere by anyone!
 Ying-Lan: That's wonderful to have a special Christmas in Norway.
 Maggi:but i AM NOT MAKING MYSELF CRAZY
 Maggi: oops
 MichaelC: Are you sure!
 Maggi: :-)
 Maggi: I was always crazy, right?!
 Ying-Lan: Why? Who are driving you carzy?
 MichaelC: Well I must be the only one here not tired. (And yes Maggie you're MAD.)
 Maggi: You live in Oz...where casn you go?
 Maggi: I am pleasqntly pooped...:-)
 MichaelC: Good point maggie. I'm just too far away from everyone.
 Maggi: plasantly
 MichaelC: Try pleasantly!
 Maggi: pleasantly
 Maggi: better?
 MichaelC: 10/10!
 Maggi: :-)
 MichaelC: How long do you 2 get for holidays? 2 or 3 weeks?
 MichaelC:)BOOM
 MichaelC:)BOOM
 Maggi: I have 3 or so free
 Ying-Lan: We have no Christmas Holidays...
 MichaelC: That was to wake you up Ying!
 Maggi: I need them
 Ying-Lan: ^No Christmas Holiday ... only 1 day.
 Maggi: Course I have no income either
 Maggi: but money isn't everything
 MichaelC: No holidays - sad. But I guess that's because Taiwan is not a Christian country...is that right?
 Ying-Lan: Yes.
 Ying-Lan: We have Chinese new year holiday.
 Maggi: They get holidays another time
 MichaelC: Good - and then I'll be working!
 Ying-Lan: But only 3 or 4 days.
 Ying-Lan: NOT 3 or 4 weeks.
 MichaelC: So do you live on savings for those few weeks of hols
 Maggie?
 MichaelC: Is that OK?
 Maggi: yep
 Ying-Lan: Michaelc, do you get the pay when you are on holiday or vacation?
 Maggi: I made some good money last couple of months

Appendix 4: 147 numbered turns of log of chat S010

1. Ying-Lan: ^How to open it?
2. Vance: This is going to be hard. I don't know. Have you tried hi-lighting some characters?
3. Ying-Lan: ^it is not cloumn, it is picture.
4. Vance: Let's try making some text in two columns and inserting the picture in one of the columns.
5. Ying-Lan: ^I see.
6. Ying-Lan: ^I will do it after class.
7. Ying-Lan: ^Did you enjoy Christmas in UAE?
8. Vance: I'm trying it now.
9. Vance: Yes. My eldest son is visiting from California.
10. Vance: What about you?
11. Ying-Lan: ^You must had a good Christmas.
12. Vance: You must have had ...
13. Vance: (grammar)
14. Ying-Lan: ^Family is very import for live.
15. Ying-Lan: ^You must have had a good Christmas.
16. Vance: Yes, we try to get together at Christmas. My son is only 20. Still a baby.
17. Ying-Lan: ^Vance, he only is 20 years old.
18. Ying-Lan: ^He is very young.
19. Vance: My other son is 13.
20. Ying-Lan: ^I am 35 years old. Sometimes, I like a child.
21. Ying-Lan: ^I am easy to be angry.
22. Ying-Lan: ^Just being myself.
23. Vance: The most successful person in life is the one who stays a child the longest.
24. Vance: I can't seem to get text to go around a picture in a column.
25. Vance: There should be a way to do it.
26. Ying-Lan: ^Do you use "Front page" to edit your home page?
27. Vance: I have used it, but I didn't like it. I have a copy, but now I don't use it.
28. Vance: Do you use it?
29. Ying-Lan: ^Not yet
30. Ying-Lan: ^I don't know how to use it.
31. Ying-Lan: ^I tried to read the help file.
32. Vance: Some teachers here use Hot Metal. They say it's very good.
33. Ying-Lan: ^It is difficult for me.
34. Ying-Lan: Ht metal
35. Ying-Lan: ^I have no "Hot metal"
36. Vance: Hot Metal. I can find the web site.
37. Ying-Lan: ^Is it free to down load?
38. Vance: You can get a trial version. After that you pay something.
39. Vance: I'm at <http://www.sq.com/products/hotmetal/>
40. Vance: sq stands for SoftQuad.
41. Vance: Do you have a web browser going?
42. Ying-Lan: ^i am at the web site
43. Ying-Lan: ^Is it easy to learn?
44. Vance: I'm doing the download, as long as I'm here.
45. Vance: I think it's easy to learn.
46. Vance: As long as you're browsing, why not go to [geocities.com](http://www.geocities.com) and start a web site?
47. Vance: <http://www.geocities.com/>

48. Ying-Lan: ^What does "Deliver the Sizzle " mean?
 49. Vance: Sizzle is the sound of grease cooking, like bacon.
 50. Vance: It implies heat, energy ...
 51. Ying-Lan: ^Which one I choice?
 52. Ying-Lan: ^I choice which one?
 53. Vance: What are the choices? (I don't know where you are)?
 54. Ying-Lan: ^products/index.html
 55. Vance: Hotmetal Pro 5.0
 56. Vance: products/hotmetal/
 57. Vance: At products/hotmetal/ click on download
 58. Ying-Lan: ^how much money I have to pay ?
 59. Vance: Would you like to visit the Geocities site while I'm here? I could help you set up a web page.
 60. Ying-Lan: ^i can not find the price
 61. Ying-Lan: ^now?
 62. Vance: Yeah, why not?
 63. Ying-Lan: right
 64. Maggi: @64,64 !It's Maggi
 65. Maggi: Hi
 66. Vance: Hey Maggi. I've just invited YL to browse over to Geocities and set up a web site.
 67. Vance: Hey, how was your hot date?
 68. Maggi: Ok...go ahead...oh that was fabulous!!!!!!
 69. Ying-Lan: ^hi
 70. Maggi: Hi Ying!
 71. Ying-Lan: ^Let's go to web head first!
 72. Vance: To web head?
 73. Maggi: ?
 74. Vance:
<http://www.geocities.com/Athens/Olympus/4631/efi/webheads.htm>
 75. Ying-Lan: ^I am here.
 76. Vance: At the webheads page?
 77. Ying-Lan: ^Yes.
 78. Vance: OK, and what are you looking for there?
 79. Maggi: Hey...verys nice!!!!!!
 80. Maggi: whoops...very
 81. Vance: YL's page is the best.
 82. Ying-Lan: ^I don't know where is the gate of geocitie.com?s'
 83. Vance: Oh, btw, Hot Metal is 99 pounds according to their web site.
 84. Vance: <http://www.geocities.com>
 85. Maggi: 99 pounds in weight or price?
 86. Ying-Lan: ^price
 87. Vance: right
 88. Maggi: what do you get for 99 pounds?
 89. Ying-Lan: ^Hot matal
 90. Vance: Hey, I just told their web page I was in the states, and they quoted me 99 dollars. That's quite a diffenence.
 91. Maggi: I think I will pass...
 92. Vance: difference ...
 93. Maggi: big difference Vance,...
 94. Ying-Lan: ^A kind of progam helps people to make home pages.
 95. Maggi: get them down to 99 marks...
 96. Vance: If you order it, when it asks "Which country are you visiting from?" be sure and select USA.
 97. Ying-Lan: ^I don't think it is helpful.
 98. Vance: For Germany it's 259 DM.
 99. Maggi: I am still a little nervous ordering online except from Amazon.com
 100. Vance: How much is that in dollars?
 101. Ying-Lan: ^They will collect GBP99 from my credit account.
 102. Vance: I've had good luck so far with online ordering.

103. Maggi: too much...I'll wait for the Euro...:-)
 104. Ying-Lan: ^me too.
 105. Vance: We have to do it because we can't get a lot of things here otherwise.
 106. Ying-Lan: ^To do what?
 107. Maggi: true...handy then isn't it Vance?
 108. Vance: Anyway I'm just visiting geocities.com ... are you there?
 109. Maggi: I am...
 110. Vance: We have to shop online ...
 111. Ying-Lan: ^I am here to shop on line?
 112. Ying-Lan: ^Who is the ovner of Geocities?
 113. Ying-Lan: owner
 114. Maggi: Shopping for English maybe ... not more!
 115. Vance: A lot of quality things I am used to from home are not available in the UAE, so I shop online.
 116. Maggi: Such as Vance>>>>>>?
 117. Ying-Lan: ^Postage is very expensive.
 118. Maggi: Peanut butter?
 119. Maggi: I could send you a care package!
 120. Ying-Lan: ^Last week, I ordered a book only 2.65 but I have to pay 8.65 including postage fee.
 121. Maggi: With Amazon.com they have an agreement with a publishing company here in Germany Ying.
 122. Ying-Lan: ^Vance, There is not butter peanut in UAE?
 123. Vance: Here in the UAE, you'd have to pay \$10 for the book anyway.
 124. Maggi: I get the books shipped from a warehouse here and they come in a couple of days.
 125. Ying-Lan: ^Really?
 126. Vance: Actually, we get most common things. It's specialized things, like caving equipment ...
 127. Maggi: well...no wonder Vance!
 128. Vance: btw, I'm at <http://www.geocities.com/join> - That's the starting point
 129. Ying-Lan: ^DHL just lost my book and tape ...
 130. Maggi: How many caves do you crawl around in....?
 131. Vance: Check out
<http://www.geocities.com/Athens/Olympus/4631/archcave.htm>
 132. Ying-Lan: ^I ordered the package by DHL World mail.
 133. Maggi: ok...I am at join...
 134. Ying-Lan: ^Where is join?
 135. Vance: <http://www.geocities.com/join/>
 136. Maggi: [geocities.com/join](http://www.geocities.com/join)
 137. Vance: Do you want to do this too, Maggi?
 138. Ying-Lan: ^I am at [geocities.com/join/](http://www.geocities.com/join/)
 139. Maggi: this looks really interesting...
 140. Vance: OK. Choose Free Home page program
 141. Maggi: ok
 142. Vance: Maybe I'll start a new one while I'm at it.
 143. Ying-Lan: ^One more question, Is it necessary to accept the cookies?
 144. Vance: Now we've got to fill out the form
 145. Maggi: If I do this I will have a new home, won't I?
 146. Vance: You can try to decline the cookies and only except them if you have to.
 147. Ying-Lan: rejct?

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CMC environments and tools

<i>ICQ</i>	http://web.icq.com
<i>Daedalus InterChange</i>	http://www.daedalus.com/
<i>MSN chat</i>	http://chat.msn.com
<i>MSN messenger</i>	http://messenger.msn.com
<i>Neteach-L</i>	http://www.ilc.cuhk.edu.hk/english/neteach/main.html
<i>SchMOOze University</i>	http://schmooze.hunter.cuny.edu:8888
<i>Tapped In</i>	http://www.tappedin.org
<i>The Palace</i>	http://www.thepalace.com
<i>Webheads home page</i>	http://www.homestead.com/vstevens/files/efi/webheads.htm
<i>Yahoo groups</i>	http://groups.yahoo.com/
<i>Yahoo messenger</i>	http://messenger.yahoo.com/
<i>ytalk</i>	http://www.iagora.com/~espel/ytalk/ytalk.html

